Amendments To The Specification:

Please amend the specification as follows:

On page 1, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

Many problems exist with the known methods for producing warning light signals. One particular problem with known light sources is their reliance on mechanical components to revolve or oscillate the lamps to produce the desired light signal. Additionally, these components increase the size of the light bar or emergency lights which may adversely affect the ~~vehicles~~ vehicle's aerodynamic characteristics. Moreover, because of the relatively poor reliability of conventional lighting and the complexity of the present strobe rotational systems there is an increased likelihood that a breakdown of the light bar or light source will occur requiring the repair or replacement of the defective component. Finally, conventional light bars and light sources require a relatively large amount of electrical current during operation. The demands upon the electrical power system for a vehicle may therefore exceed available electrical resources reducing optimization of performance or worse, generating a potential hazard ~~form~~ from shorted or ~~over-heated~~ over-heated systems.

On page 6, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

A need exists to reduce the size of light sources on an emergency vehicle and to improve the efficiency of the light sources particularly with respect to current draw and reduced aerodynamic drag. In addition, the flexibility for the positioning of the light sources about a vehicle ~~for observation by individuals~~ is required to be enhanced in order to optimize utility for a warning signal light. In order to satisfy these and other needs, more spatially efficient light sources such as LED's are required.

On page 8, and continuing onto page 9, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

In the past it has not been known to use the stationary lights, runway lights, and/or approach lights as a communication source for the control of air traffic at an airport. Further, in

the past an aircraft rotating exterior dome illumination source has not been used to simultaneously function as a communication device for the transmission and receipt of variable and/or pulsated light signals as generated from an LED light source. The variable and/or pulsed light signals may be alternatively ~~descried~~ described as the systematic information transfer through encrypted/pulsed light or acronym SIT-TEL. Further, it has not been know to use a variable and/or pulsating light signal or SIT-TEL communication, as generated from an anti-collision light, as an information courier through the use of LED technology.

On page 10, please replace the paragraph beginning at line 18 with the following rewritten paragraph:

~~A need further exists~~ Needs continue to exist for the use of an LED illumination source and communication device for use on aircraft support vehicles, to enhance visual identification and location relative to an airport[.]; ~~A need also exists~~ to augment the proximity warning systems for aircraft and the regulation of air and ground traffic adjacent to an airport[.]; ~~In addition, a need exists~~ to enhance the proximity and anti-collision warning light systems of towers for identification by aircraft[.]; ~~A need further exists~~ for the provision of economical and high brightness LED technology light sources for use in airport runway lighting, airport obstruction lighting, tower lighting, obstacle lighting, taxi lighting, and for use on aircraft as rotating domes and/or flashing beacons and/or landing lights.

On page 10, and continuing onto page 11, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

Law enforcement officers in the past have generally been limited to visualization of a license plate for identification purposes. Upon visualization of a license plate, an officer may enter the observed license plate into a data base for identification of vehicle registration information. In the past, law enforcement personnel have also utilized optical aids such as focused optics and/or scopes to assist in the visualization and identification of license plates on moving vehicles. The optical and/or focused optic devices are generally expensive and may be extremely difficult to operate during moving conditions. ~~Target~~ Vehicles having the targeted license plates frequently change lanes and/or bounce upon uneven roadways rendering observation difficult.

On page 12, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

In the past, buoys have been used in marine applications to identify channels and hazards such as reefs, bars, rocks, and/or shallow water conditions. The warning buoys as known have frequently not included visual warning light signals. ~~or~~ Alternatively, the known warning buoys have included visual warning light signals which have not been bright[,] or rugged[,]. ~~and~~ These warning buoy light sources have suffered ~~from~~ a relatively short life and have required a relatively large battery source. As such, the warning light signals used with marine buoys have not been efficient for signaling marine traffic. No marine buoy is known which utilizes LED technology to conserve power and to provide a durable and long useful life light source which may be operated on a relatively small battery and/or solar power source.

On page 12, and continuing onto page 13, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

In the past, emergency vehicles have used radio frequency transmissions to trigger intersection semaphores to switch to a green light signal to permit uninhibited passage of the emergency vehicle through the intersection. A problem with the radio frequency transmissions is the lack of available radio wavelengths, and the localized radio frequency interference, adjacent to intersections. In addition, the devices as known frequently have a large current consumption and are relatively expensive. ~~Further, the~~ The positioning and wiring of OPTICOM receiving and switching devices upon semaphores is generally elevated above an intersection, increasing initial construction expenses. The positioning of the OPTICOM receiving and switching devices, therefore renders maintenance and/or replacement problematic.

On page 13, and continuing onto page 14, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

According to the invention, there is provided a light emitting diode (LED) warning signal light and ~~SIT-TEL~~ systematic information transfer through encrypted pulsed light SIT-TEL communication system which may be depicted in several embodiments. In general, the warning signal light and SIT-TEL pulsed light communication system may be formed of a single row, single source, or an array of light emitting diode light sources configured on a light support

and in electrical communication with a controller and a power supply, battery, or other electrical source. The warning signal light and SIT-TEL pulsed light communication system may provide various light signals, colored light signals, or combination or patterns of light signals for use in association with a vehicle or by an individual. These light signals may include a strobe light, a pulsating light, a revolving light, a flashing light, a modulated or variable intensity light, an oscillating light, an alternating light, a pulsating light signal, an encoded signal, and/or any combination thereof. Additionally, the warning signal light and SIT-TEL pulsed light communication system may be capable of displaying symbols, characters, or arrows. Rotating and oscillating light signals may be produced by sequentially illuminating columns of LED's on a stationary light support in combination with the provision of variable light intensity from the controller. However, the warning signal light and SIT-TEL pulsed light communication system may also be rotated or oscillated via mechanical means. The warning signal light and SIT-TEL pulsed light communication system may also be easily transportable and may be conveniently connected to a stand such as a tripod for electrical coupling to a power supply, battery, or other electrical source as a remote stand-alone signaling or communication device.

On page 15, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

A light bar may also be provided having one or more elevated pod illumination elements. Each pod illumination element may be raised with respect to a light bar by one or more supports which extend upwardly from the base. The pod illumination elements may ~~alternatively~~ be oval or circular in shape. The light bar may also include one or more longitudinal light elements integral to the base which extend transversely to the roof of an emergency vehicle.

On page 17, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

A SIT-TEL LED light system and license plate communication system may include a license plate having an LED light transmitter and an LED light receiver/receptor. The LED transmitter and the LED receptor are each coupled/connected to a controller. The controller is constructed and arranged for regulating a modulated, variable, and/or pulsed SIT-TEL light

signal to be received and recognized by a second receptor located within a law enforcement vehicle. A response SIT-TEL LED pulsed light signal may be generated by the law enforcement vehicle and received by the first receptor integral to the license plate. The responsive pulsed SIT-TEL LED light signal as transmitted from the license plate LED transmitter may include a series of unique signal packets representative of information such as the license plate number, vehicle registration information, and vehicle license plate status. The controller on the law enforcement vehicle may then process the signal received by the license plate for comparison to a data base to display transmitted information on a visible screen for observation by an officer. The SIT-TEL LED light signal system and license plate facilitates interrogation of a license plate without necessitating a police vehicle to close to an observable distance during investigation activities. The existence of a law enforcement vehicle may ~~then be~~ continue to be undetected facilitating law enforcement activities. The SIT-TEL LED light system and license plate invention may also function to verify the accuracy of a tagged vehicle by law enforcement officers during law enforcement activities.

On page 29, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

FIG. 16 is a detailed isometric view of a prior art xenon strobe tube and standard mounting base;

On page 29, please replace the paragraph beginning at line 8 with the following rewritten paragraph:

FIG. 18 is a detailed isometric view of ~~an~~ a prior art incandescent lamp light source and standard mounting base;

On page 29, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

FIG. 20 is a front view of a standard prior art halogen light source mounted in a rotating reflector;

On page 29, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

FIG. 31 is an exploded isometric view of an alternative culminator assembly and modular LED light source;

On page 31, please add the following paragraph between lines 26 and 27:

FIG. 67B is an alternative top environmental view of an emergency vehicle and pulsed light system;

On page 32, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

FIG. 78 is a partial cut away view of a flare having ~~and~~ an LED SIT-TEL communication system;

On page 32, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

FIG. 84 is an environmental view of the controller of the pulsed light signaling system within the cockpit of an aircraft; ~~and~~

On page 32, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

FIG. 85 is a detail alternative view of the hand held pulsed light signaling system[.];

On page 32, please add the following new paragraphs following line 30:

FIG. 86 is a detail view of the SIT-TEL pulsed light communication system;

FIG. 87A is an alternative detail view of the SIT-TEL pulsed light communication system;

FIG. 87B is an alternative detail view of the SIT-TEL pulsed light communication system;

FIG. 87C is an alternative detail view of the SIT-TEL pulsed light communication system; and

FIGS. 88A-C constitute a block diagram of the operation of the first, second, and third controllers within the SIT-TEL pulsed light communication system.

On page 33, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

Referring to FIGS. 3 and 9, warning signal light 10, comprises light support 12, LED light sources 30, controller 50 (shown in FIG. 11), and connecting portion 40, for attaching the warning signal light 10, to light bar 70, or gyrator 90[,]. The warning signal light 10, operates to create a warning signal for use by an emergency vehicle 104, by selectively activating light sources 30 or by selectively activating combinations and/or patterns of light sources 30 by using controller 50. Alternatively, warning signal light 10, may be formed of one or more solitary LED light sources 30.

On page 34, and continuing onto page 35, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

In one embodiment, controller 50 generally comprises circuit board ~~54~~ or LED mounting surface having microprocessor 52 attached to a low voltage power supply, battery, or electrical source 56. Microprocessor 52 is configured through circuitry 53 to selectively activate columns 32, rows 34, or one or more individual LED's 30. Transistors Q9 and Q10 are in electronic communication with microprocessor 52, power supply, battery, or electrical source 56, and their respective columns 32.9 and 32.10 of LED's 30. Columns 32 of LED's 30 are connected to transistors Q1-Q8, which are in turn connected to microprocessor 52 through resistors R1-R8. Microprocessor 52 is capable of selectively activating transistors Q1-Q8 to allow current flowing through transistors Q9 and Q-10 to activate the selected column 32 of LED's 30. This circuit is capable of producing any one or more of the different types of light signals as earlier identified.

On page 39, please replace the paragraph beginning at line 20 with the following rewritten paragraph:

Mechanical rotation and oscillation of warning signal lights 10 about axis "A" is possible by way of attachment to gyrator 90 depicted in FIG. 3. Gyrator 90 mounted to light bar 70, generally comprises electric motors 96 having cables 97. Gyrator 90 is configured to receive connecting portion 40 of warning signal light 10. Cable 97 is preferably connected to a power supply and either an external controller 55 or controller 50.

On page 39, and continuing onto page 40, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

Gyrator 90 may be capable of rotating or oscillating warning signal light 10 about a single or dual axis of rotation "A". FIG. 3 shows gyrator 90 configured to rotate or oscillate warning signal light 10 about a vertical axis "A" by way of motor 96.1 and oscillate warning signal light 10 about a horizontal axis "A" by way of motor 96.2. Rotation or oscillation of warning signal light 10 about vertical axis "A" is accomplished through direct attachment of connecting portion to motor 96.1. Oscillation of warning signal light 10 about horizontal axis "A" is accomplished by attaching swivel arm 99 to bracket 99.1 and post 99.2 which is mounted to motor 96.2.

On page 42, and continuing onto page 43, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

The light reflector 260 may be a conventional light reflector of the type found in vehicles having a clear plastic or glass lens cover. The glass or lens cover may be fitted over the front edge of the reflector 260 in a manner which is conventional for vehicle lamps. The light reflector 260 may ~~be parabolically~~ have a parabolic or other shape. The light reflector 260 may be mounted to a motor for rotation about a vertical axis. In this embodiment the light source/replacement lamp 200 may be integrally connected or affixed to the reflector 260 for simultaneous rotation about the vertical axis during use of the motor. (FIGS. 17, 20, 21, 22) Alternatively, the light source/replacement lamp 200 may be fixed proximate to the vertical axis where the light reflector 260 is rotated around the stationary replacement lamp 200 to provide for the visual appearance of a rotational light source.

On page 50, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

All individual LED light sources 30 within a light bar 70 or light support are not required to be simultaneously and incrementally illuminated to provide for the appearance of rotation. For example, a light bar 70 or light support may be separated into one or more distinct segments 326 which are formed of one or more columns 32 of LED light sources 30. A particular segment 326 may be selected as a central illumination band which may receive the

greatest exposure to the modulated or variable light intensity and, therefore, provide the brightest observable light signal. (FIG. 35) An adjacent segment 332 may be disposed on each side of the central illumination band 330 which in turn may receive modulated or variable light intensity of reduced magnitude as compared to the central illumination band 330. A pair of removed segments 333 may be adjacent and exterior to the segments 332, and in turn, may receive exposure to a modulated light intensity of reduced magnitude as compared to segments 332. The number of desired segments may naturally vary. The controller 50 may thereby regulate the light intensity to provide a modulated or variable light signal for each individual segment 330, 332, or 333 (FIG. 35) to provide for a unique warning light effect for the light bar 70 or light support.

On page 51, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

Referring to ~~FIG. 33,~~ FIGS. 33, 34, and 35, the emergency vehicle 300 includes a light bar or light support 302 which may include one or more panels of LED light sources 306. A strip LED light source 308 may also be secured to the exterior of the emergency vehicle 300 at any location. It is anticipated that the strip LED light source 308 may encircle an emergency vehicle 300 to enhance the visualization of the emergency vehicle 300 positioned proximate to an emergency situation.

On page 51, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

Referring to FIG. 34, the strip LED light source 308 is comprised of a circuit board 310 having an array 312 of individual LED light sources 306. The LED light sources 306 are in electrical communication with each other via electrical contacts 314. Each circuit board 310 is in electrical communication with a power supply and/or controller 50 via the use of wires ~~316~~. Each individual LED light source 306 as included within a strip LED light source 308 may be enclosed within a reflector 370 to facilitate and maximize light output along a desired visual line of sight. (FIGS. 26-30) The LED light sources 306 have maximum illumination at an angle of incidence approximately 40°-45° downwardly from vertical. The strip LED light sources 308 also include a back-side. The back-side includes an adhesive, magnetic, or other affixation

device which may be used to secure the strip LED light sources 308 to the exterior of an emergency vehicle 300 in any desired pattern or location. The strip LED light sources 308 may also be enclosed within a transparent cover 324 which prevents moisture or other contamination from adversely affecting the performance of the LED light sources 306 during use. (FIGS. 31-32)

On page 54, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

As may be seen in FIGS. 31, 32, 37, 38, 39, and 50, in an alternative embodiment, the light bar, light support 302, or panel 304 may be formed of a single row of LED light sources 306. Within this embodiment, the LED light sources 306 are positioned within circular openings 344 of circuit board or LED mounting surface 346 (FIG. 37). Circuit board 346 may be affixed to aluminum base 348 through the use of adhesive including glass beads where the circular openings 344 assist in the establishment of a heat sink for the individual LED light sources 306. The use of adhesive including glass beads to affix the LED light sources 306 and circuit board 346 to the aluminum base 348 assists in the creation of electrical contact for the light bar or light support 302.

On page 55, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

As depicted in ~~FIG. 37~~ FIGS. 37, 38, and 39, the top surface of the circuit board or LED mounting surface 346 may include two reflectors or mirrors 350. The reflectors or mirrors 350 are preferably elongate and are positioned substantially parallel to each other and are adjacent or aligned to the ~~rows~~ row of individual LED's 306. The reflectors or mirrors 350 diverge upwardly and outwardly from a position proximate to the LED light source 306 and aluminum base 348. As such, the mirrors 350 have a separation distance which is narrow proximate to the LED light sources 306, where the separation distance becomes larger as the distance vertically from the aluminum base 348 increases.

On page 57, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

Referring to FIG. 26 a plurality of culminator cups or reflectors ~~270~~ 370 may be

formed into a culminator assembly or array 392. The culminator assembly or array 392 is adapted for positioning over an array of LED light sources 306. Examples of arrays of LED light sources 306 which may be utilized with a culminator assembly 392 are depicted in FIGS. 3-10, 12, 14, 15, 23-25, 31, 32, 34, 35, 37, 39, 40, 44, and 47.

On page 58, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

The strip LED light ~~source~~ sources 308 may be used on other devices and are not necessarily limited to use on an emergency vehicle 300. It is anticipated that the strip LED light sources 308 may be used on a variety of apparatus including but not limited to snowmobiles, water craft, helmets, airplanes, or any other device which may accept use of an LED light source.

On page 60, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

FIG. 43 represents graphically the variable or pulsating illumination of the observed light as reflected from the reflector 434 of ~~fig.~~ FIG. 42. Time is represented along the x-axis and increasing brightness is depicted along the y-axis. The graph of FIG. 43 shows the gradual increase in brightness of the observed light as the reflector 434 is rotated to a maximum illumination corresponding to direct in line observation of the warning light signal and then the gradual decrease in observed light intensity as the reflector 434 is rotated away from direct in line sight. The observed warning light signal is not required to be extinguished and may be reduced to a minimum observable intensity of approximately thirty percent.

On page 63, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

Referring to FIG. 47 an alterative embodiment of a reflector assembly is disclosed. In general, the reflector assembly of FIG. 47 includes an enclosure 518. Positioned within the interior of enclosure 518 is a motor 520 having a shaft 522 and a gear 524. A first support 526 has a periphery having a plurality of teeth 528 adapted to releasably engage the gear 524. The first support 526 includes a mirror bridge 530 which is used to position a mirror 532 at an approximate angle of 45° relative to a LED light source 306. Within the interior of the first support 526 is located a culminator assembly 534 which may include one or more reflective cups.

Individual LED light sources 306 are positioned within each of the culminator cups of the culminator assembly 534 to maximize illumination of emitted light for reflection from the mirror ~~542~~ 532.

On page 63, please replace the paragraph beginning at line 22 with the following rewritten paragraph:

In operation, the individual LED light sources 306 are connected to a power source and/or a controller 50 as earlier described. An infinite number of independent visually distinctive warning light signals may be emitted through the use of the rotational reflector as depicted in ~~487~~ FIG. 47. An infinite number of warning light signal combinations may also be provided by the controller 50 for use with the rotational reflector of FIG. 47.

On page 63, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

Each of the mirrors ~~542~~ 532 may be positioned for reflection and transmission of light to a desired field of vision relative to the rotational reflector. A flashing and/or rotational light source may be provided for observation by an individual.

On page 63, and continuing onto page 64, please replace the paragraph beginning at line 31 with the following rewritten paragraph:

The first support 526, second support ~~546~~ 536, and third support 538 may be synchronized to provide for a unique warning signal light for observation by an individual. The engagement of the motor 520 for rotation of the gear 524 simultaneously rotates the first support 526, second support 536 and third support 538 for the provision of a warning light signal.

On page 68, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

The LED take-down light 700 may ~~be formed of~~ include one or more LED's 336. The LED's ~~336~~ 786 forming the LED take-down light 700 may each be surrounded by a culminator 370 as depicted and described with reference to FIGS. 26-32 having one or more reflective sections 374 for transmission of light along a desired line of illumination. Alternatively, a reflector 350, 434 may be positioned adjacent to LED light sources 336 as

described in reference to FIGS. 37-47. The reflector 350, 434 used in conjunction with take-down light 700 may be stationary or may be rotatable through the use of a rotational device. The LED's ~~336~~ 786 forming the LED take-down light 700 may also be angularly offset with respect to horizontal to provide illumination along a preferred line of illumination as depicted with reference to FIGS. 13 and 14.

On page 68, and continuing onto page 69, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

The LED take-down light 700 is preferably coupled to a power supply, battery, or other low voltage power source. The take-down light 700 may also be electrically coupled to a controller 50 for illumination of all or part of the LED light sources ~~336~~ 786 to provide for a desired level of illumination for an area adjacent to an emergency vehicle. The controller 50 may alternatively provide one or more of the many types of light signals as earlier described.

On page 69, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

Further, the intensity of the LED light sources ~~336~~ 786 may be selectively regulated by a controller 50 dependent upon the darkness of the conditions to be illuminated during law enforcement activities. The controller 50 may be coupled to a light or photosensitive detector to assist in the selection of a desired level of light output dependent upon the environmental conditions encountered by the law enforcement personnel during use of the LED take-down light 700.

On page 69, please replace the paragraph beginning at line 8 with the following rewritten paragraph:

The LED take-down light 700 may be formed of one or more adjacent panels or modules ~~480~~ 784 of LED illumination sources ~~336~~ 786 along a front face 710, 764 for a light bar 704, 760. Alternatively, a plurality of panels or modules ~~480~~ 784 of LED light sources ~~336~~ 786 may be formed along the front face 710, 764 of the light bar 704, 760 as well as a plurality of panels or modules ~~480~~ 784 of LED light sources ~~336~~ 786 along the rear face 712, 776 of the light bar 704, 760. The panels or modules ~~480~~ 784 selected for the LED illumination sources ~~336~~ 786 may be linear, square, rectangular and/or may have two or more sides, or may be a single

illumination source. Each individual panel or module ~~480~~ 784 of LED illumination sources ~~336~~ 786 may be independently illuminated by a controller 50 to provide one of a plurality of individual and distinct warning light effects. For example, a first, third, and fifth panel or modules ~~480~~ 784 of LED sources ~~336~~ 786 may be illuminated where the second and fourth panels or modules ~~480~~ 784 are not illuminated. Alternatively, the first, third, and fifth panels or modules ~~480~~ 784 of LED light sources ~~336~~ 786 may be continuously illuminated and the second and fourth panels or modules ~~480~~ 784 may be illuminated to provide a flashing or strobe light signal. Illumination of any combination of panels or modules ~~480~~ 784 may be provided to create a preferred unique warning light signal for the LED take-down light 700. A constant illumination signal may be provided or a flashing, strobe, and/or modulated light intensity may occur to provide one of a plurality of distinct light signals for use within an emergency situation.

On page 69, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

The LED light sources ~~336~~ 786 within the LED take-down light 700 may be angularly offset as depicted within FIG. 14 to provide a maximum illumination at a preferred distance adjacent to the front of a law enforcement vehicle.

On page 70, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

As depicted in FIGS. 61, 62, 65, and 66, the LED alley lights 800, 808 provide ~~illumination~~ perpendicularly outward illuminating areas adjacent to the drivers side and passengers side of the vehicle 706. The LED Alley lights 800, 808 are almost identical in construction and functionality to the LED take-down light 700. The LED alley lights 800, 808 may be mounted to a mechanical pivot, gears, and/or rotational device which may include an electric motor. The rotation of the mechanical pivot, or gears may alternatively be terminated to permit fixed angular illumination of areas adjacent to a law enforcement vehicle 706 which are not perpendicular to either the drivers or passenger sides in a manner similar to the functionality and operation of a spot light. In this regard, the LED alley lights 800, 808 may be manipulated forwardly, rearwardly, upwardly, and/or downwardly to provide illumination of a desired area relative to an emergency vehicle 706.

On page 70, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

The LED alley lights 800, 808 may be integral to, or removable from, the opposite ends of light bar 704, 760. As such, the LED alley lights 800, 808 may be releasably secured to ~~the~~ opposite ends of the light bar 760 through the use of fasteners ~~778~~ such as bolts and nuts, screws, adhesives, straps, and/or hook and loop fabric material. An individual may simultaneously illuminate the LED take-down light 700 and the LED alley lights 800, 808 or may alternatively illuminate the LED alley lights 800, 808 independently from the LED take-down light 700 within an emergency situation.

On page 70, and continuing onto page 71, please replace the paragraph beginning at line 32 with the following rewritten paragraph:

Referring to FIGS. 61, 62, 65, and 66, the take-down light 700 may be positioned inside of a housing, base, or enclosure 780 which has a transparent surface 782 permitting light as emitted from LED light sources ~~784~~ 786 to pass therethrough. Within the interior of the base/housing 780 are located one or more light emitting diode light ~~sources~~ modules 784. Each LED light ~~source~~ module 784 may include one or more individual light emitting diodes 786 as integral to circuit board 788. The functions and operation of LED light sources, LED's, and circuit boards are identical to the light sources described in reference to FIGS. 31 and 32. Each LED light ~~source~~ module 784 may also include electrical couplers or connectors 790 which may be adapted for penetrating engagement into a receiving slot 792. The LED light ~~sources~~ modules 784 ~~may be modular~~ as earlier described with reference to FIGS. 51-58 ~~to~~ facilitate ease of replacement herein. An individual may thereby easily replace and/or substitute an LED light ~~source~~ module 784 with another LED light ~~source~~ module having the same or different colors or intensity characteristics. The circuit board 788 and/or LED light ~~sources~~ modules 784 may be panels or strips as described with reference to FIGS. 34 and 35.

On page 71, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

The LED lights 786 are preferably spaced about circuit board 788 in any pattern and/or combination including the use of a linear configuration. Adjacent to each LED light

~~source~~ module 784 is positioned a reflector which may be a culminator 730, 534, as earlier described in reference to FIGS. 26-32 and 47. Alternatively, a reflector or mirror 802, 434, 350, as described in reference to FIGS. 21, 22, 37-39, 40-42, and 47, may positioned adjacent to LED light ~~sources~~ modules 784 to reflect light emitted by LED's 786 in a desired direction for maximization of illumination characteristics for the alley lights 800, 808 and/or take-down light 700. The utility of the alley lights 800, 808 and/or take-down light 700 is thereby enhanced. The reflectors 370, 534, 434, 802, or 350 may be integral and/or attached to circuit board 788, a frame, or to a support adjacent to circuit board 788 to reflect light emitted from LED's 786 in a desired direction.

On page 71, and continuing onto page 72, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

A first alley light 800 may be positioned within housing 780 proximate to motor 794. The first alley light 800 may be stationary and/or rotatable relative to the light bar 760. The first alley light 800 may or may not be engaged to a gear 804. If rotation of the first alley light 800 is desired, then gear 804 may include a receiving slot 792 to provide electrical connection and power to the LED light ~~source~~ module 784 for provision of light. Gear 804 may also be coupled to worm gear 796 for the provision of rotation and/or oscillation motion. If motion of first alley light 800 is not desired, then stationary positioning of LED light ~~sources~~ modules 784 relative to housing 780 may be provided with suitable electrical connection to a vehicle power source.

On page 72, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

Second gear 806 may also include a receiving slot 792 adapted to receivingly engage electronical connectors 790 as integral to circuit board 788 of LED light ~~sources~~ modules 784. Light ~~sources~~ modules 784 also include a plurality of individual LEDs 786 which may each be positioned within a culminator 534, 370, 802. A controller 50 may be electrically connected to each LED light ~~sources~~ modules 784 as coupled to gear 804, second gear 806, third gear 810, and/or housing 780 for selectively illumination of individual LED's 786, or for illumination of any combination of LED's 786. The features as earlier described for controller 50 are equally

applicable for use with the take-down light 700, first alley light 800, and second alley light 808, relative to distinct types and combinations of types of warning light signals.

On page 73, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The controller 50 activating the motor 794 may selectively initiate an intersection clearing illumination mode or sequence. Motor 794 causes the shaft 798 to rotate imparting motion to the worm gear 796. The rotation of the worm gear 796 may then be transferred to the first alley light 800 through coupling to the first gear 804. Alternatively, the worm gear 796 may be directly coupled to the second gear 806. In another embodiment, motion may be imparted to the second gear 806 through the use of a tie bar ~~842~~ 824 as connected between the second gear 806 and the first gear 804. Rotation of the worm gear 796 rotates first gear 804 whereupon motion may be transferred to the second gear 806 for movement of the second alley light 808. Rotation may be further transferred to the take-down light 700 via the coupling of the third gear 810 to the second gear 806. The tie bar 824 may extend between gear 804 and second gear 806 to synchronize motion, rotation, and illumination of the first alley light 800 relative to the second alley light 808 and take-down light 700.

On page 73, and continuing onto page 74, please replace the paragraph beginning at line 32 with the following rewritten paragraph:

The intersection clearing light mode may generally be initiated by the controller 50 which signals motor 794 to rotate second gear 806 either through rotation of first gear 804 or through direct contact with worm gear 796. The first or at rest position for the second alley light 808 directs the transmission of light in the direction depicted by arrow 812 which is generally perpendicular to the longitudinal axis of a vehicle. As the intersection clearing light mode is engaged, the counter clockwise rotation of gear 804 causes the clockwise forward rotation of the second gear 806 according to arrow 814 until an angle of forward rotation 816 is achieved. The direction of forward rotation 816 transmits light emitted from LED light ~~sources~~ modules 784 forwardly towards a corner of a vehicle at an approximate angle $\propto$ of 45°. The controller 50 may then continue to rotate the gears 804, or 806, in a counter clockwise direction for 360° rotation, or alternatively the controller 50 may signal the motor 794 to reverse direction to rotate the

second alley light 808 rearwardly back to the first at rest position indicated by number 812. During the clockwise rotation of the worm gear 796, the second gear 806, third gear 810 and take-down light 700 may be rotated in a counter clockwise direction. The initial at rest position for the take-down light 700 is forwardly with respect to the alley lights 800, 808. The engagement of the intersection clearing light mode rotates the take-down light 700 outwardly towards the sides of an emergency vehicle from a first position indicated at 818 to a second position indicated at 820 as depicted by arrow 822 of FIG. 65.

On page 74, please replace the paragraph beginning at line 19 with the following rewritten paragraph:

Alternatively, the first alley light 800 may be rotated simultaneously with the second alley light 808 by engagement between the first gear 804 and second gear ~~706~~ 806. Synchronous rotation between the first alley light 800 and the second alley light 806 may be provided through the use of the tie bar 824 or through direct coupling engagement of gears 804 and 806.

On page 75, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

In a 360° rotation cycle of the first gear 804 in a clockwise direction, motion is transferred to the second gear 806 and third gear 810 in a push-pull configuration through the tie bar 824. Clockwise rotation of the first gear 804 from a position of 0° to a position of approximately 90° causes the second gear 806 to be pulled by the tie bar 824 moving the position of the second alley light 808 from an initial position of 180° to a position of approximately 270°. Continued rotation of the first gear 804 from a position at 90° to a 180° location preferably causes the second gear 806 to be pushed by the tie bar 824 causing the second alley light 808 to be rotated in a reverse direction from a 270° position back to a 180° position. Continued rotation of the first gear 804 in a clockwise direction from a position 180° to a 270° location, in turn causes the tie bar 824 to pull the second gear 806 causing the second alley light 808 to continue to be rotated in a reverse direction from a position of 180° to a 90° location. Continued rotation of the first gear 804 in a clockwise direction from a 270° position to a 360° or initial position in

turn causes the tie bar 824 to push the second gear 806 causing the second alley light 808 to reverse directions to be rotated from a 90° position to an initial or starting position of 180°.

On page 76, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

The offset positioning of the second alley light 808 relative to the take-down light 700 prevents obstructed contact between the two light ~~sources~~ modules 784 permitting free rotational motion therebetween. The offset positioning of the second alley light 808 relative to the take-down light 700 enables the utilization of oversized or enlarged LED light ~~sources~~ modules 784 as engaged to the second or third gears 806, 810 respectively. The illumination as transmitted by the LED light ~~sources~~ modules 784 may thereby be significantly increased.

On page 77, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

In an alternative embodiment, a plurality of take-down lights 700 may be positioned adjacent to each other and disposed along the longitudinal length of a light bar 760 above the front face 764 and/or rear face 766. Alternatively, the take-down lights 700 may be formed of a plurality of LED light ~~sources~~ modules 784 positioned adjacent to each other along the entire length of the front face 764 and/or rear face 766 of a light bar 760. (FIG. 63.) The LED light sources 336, 786 in this embodiment are connected to the controller 50. The controller 50 may selectively illuminate one or more LED lights 336, 786 to provide any desired intensity of light to be used in a take-down situation by law enforcement personnel.

On page 80, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

An electrical receiving port having a cover may be placed in either the support side 842 or the tacky or adhesive base 748. The electrical receiving port is adapted to receivingly engage a plug 848 of a power cord 850. The power cord 850 may includes an adapter 736 for insertion into the cigarette lighter receiving port. Alternatively, the plug 848 may be inserted into ~~a~~ an electrical receiving port integral to either the opaque exterior surface 846 and/or frame 830.

On page 80, please replace the paragraph beginning at line 20 with the following rewritten paragraph:

The personal warning signal light 730 may be configured in any shape including, but not necessarily limited to, square, rectangular, round, and/or oval. A reduced thickness dimension may be provided following closure of the second panel 742 relative to the frame ~~834~~ 830 for placement in the first nesting closed position. The second panel 742 also functions to provide for sealing engagement to the frame 830. The LED light sources 732 are rugged and shock absorbent facilitating transportation and prolonged usefulness by an individual.

On page 81, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

As earlier depicted with reference to FIGS. 31 and 32 the LED light sources 336, 786 may be formed into modular units which may be regularly spaced along the front face 764 and rear face 766. The LED light sources 336, 786 integral to the front face 764 and/or rear face 766 are each positioned within a culminator 370, 484 as earlier described. The reflector devices as depicted and described with reference to FIGS. 37-39 may be incorporated into modular light supports 480 for utilization along a front face 764 and/or rear face 766 of LED light bar 760. The number of light emitting diode light sources 336, 786 forming each individual modular unit 480 may vary. Each modular unit 480 may include between 2 and 20 LED light sources 336, 786. Each of the LED light sources 336, 786 is electrically connected to a circuit board 346 having heat sink wells 344 as earlier described in reference to FIG. 36. The construction of the modular light supports 480 and LED light sources 336, 786 facilitates ease of color modification and versatile alternative configurations for light transmission from the light bar 760. The LED light sources 336, 786 as integral to the base 762 proximate to the front face 764 and/or rear face 766 may be formed of one or more colors. The modular light supports 480 also may preferably include electrical couplers or connectors 790 as earlier described.

On page 82, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

Light bar 760 includes base 762 which is elevated with respect to the roof of an emergency vehicle to enhance visualization during use. ~~The base 762 may be supported above~~

~~the roof of an emergency vehicle by a plurality of feet 870. The feet 870 are secured to the roof or rain channels of a vehicle through mechanical affixation mechanisms. In a preferred embodiment, four feet 870 extend from the base 762 to the roof of an emergency vehicle. Extending between each pair of feet 870 is at least one support bar 872 which serves as a frame for elevation of the LED light bar 760 above the roof of a vehicle. The feet 870 may be adjustable to facilitate use on various makes and/or models of emergency vehicles.~~

On page 84, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

Each pod illumination device 770 may include individual columns and rows of multicolored LED light sources 336, 786. Each individual light emitting diode light source 336, 786 integral to the pod illumination device 770 may also be enclosed within a culminator and/or reflector 370, 484 as earlier described having reflective and/or transparent sections. Alternatively each pod illumination device 770 may also include a reflector assembly as illustrated and earlier described within FIG. 47 which includes a culminator 370, 534 and rotational mechanism or motor 794 as positioned within the frame 866. The motor 794 provides rotational or oscillating motion to the reflector 532. Alternatively, reflector devices as earlier described with reference to FIGS. 37-42, and 44-45 may be incorporated into pod illumination devices 770. The pod illumination devices 770 also may include a frame 866 having a cover or top 874 which is removable to provide access to either a reflector assembly, culminator, modular light supports 480 and/or LED light sources 336, 786 for repair or replacement therein. The cover or top 874 may be affixed to the pod illumination devices 770 by any conventional means including but not limited to the use of bolts, screws and/or wing nuts.

On page 86, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

In an alternative embodiment, an LED light support having at least one LED illumination source may simultaneously produce and emit a warning light signal and a systematic information transfer through encrypted/pulsed light or SIT-TEL pulsated light signal, within the warning light signal where the SIT-TEL pulsed light signal is not visible to an unaided eye. The SIT-TEL pulsed light signal functions as ~~an~~ a free space carrier of information for processing by

a receiver unit. The SIT-TEL pulsed light signal may also be used independently and is not required to be incorporated as a ~~non~~distinguishable component of a warning light signal. In this instance the SIT-TEL pulsated light signal appears as a continuous light source.

On page 86, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

Light emitting diodes may be manufactured to emit light at any wavelength from infrared to visible. Therefore, an infinite variety of colors of different wavelengths of LED's are available. LED's also are extremely flexible in the provision of an instantaneous light signal which minimizes and/or eliminates carry over illumination after termination of power. For example, the application of power to a traditional light source frequently causes electrons to pass through a filament which in turn causes the temperature of the filament to increase emitting the visible light. The termination of power to a traditional light source having a filament does not immediately terminate the provision of light. A carry over illumination effect continues as the traditional light source filament cools. The traditional light source filament therefore is not flexible for receipt of a ~~vary~~ very rapid pulsed power supply for transmission of a pulsed light signal.

On page 87, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

The duty cycle and/or power to be provided to an LED light source is regulated by a controller which includes a rapid switch to enable the rapid pulsation of electrical current to the LED light source, which in turn causes the provision of a pulsating light. Simultaneously, the controller may also regulate an observable light signal for illumination in minutes, seconds, and/or fractions of seconds to provide a desired type of unique light effect.

On page 87, and continuing onto page 88, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

No device is known which replaces conventional lighting with a pulsed light communication device ~~which may~~ for transfer of information in a community or residential setting. A need exists for the use of general lighting replaced by communicating lights which are more durable, reliable, and fulfill the requirements of the conventional lighting, while

functioning as a communication channel in free space. The LED SIT-TEL illumination sources ~~802~~ 803 may digitally communicate signals, and the receivers ~~818~~ 819 enable communication from device to device through already existing light sources and systems, i.e., street lights, houses, etc., to create a free flow of communication using free space throughout the community/population centers. The SIT-TEL pulsed light signals are not limited to use with emergency communication. The SIT-TEL LED illumination sources ~~802~~ 803 generally may be formed of solid state light components capable of high speed switching which are able to sustain single or multi-plex channels of communication while appearing as a regular light. The SIT-TEL LED illumination sources ~~802~~ 803 thereby fulfill the requirements of conventional and non-conventional lighting as well as emergency or warning light systems.

On page 88, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The SIT-TEL LED pulsed light signal system in general is formed of an LED support ~~800~~ 801 having one or more first LED illumination devices ~~802~~ 803 electrically coupled thereto. The LED support ~~800~~ 801 may be formed in any shape as earlier described. The LED support ~~800~~ 801 may also be stationary and/or secured to a rotational device ~~804~~ 805 as earlier described.

On page 88, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

The first LED illumination sources ~~802~~ 803 may be comprised of a single LED which has been selected for transmission of a specific wavelength of emitted visible or nonvisible light. Each first LED illumination source ~~802~~ 803 may also be positioned to the interior of a culminator reflector assembly ~~806~~ 807 as earlier described. Alternatively, a stationary and/or rotatable reflector ~~808~~ 809 may be positioned proximate to the first LED illumination source ~~802~~ 803 to reflect a pulsed light signal along a desired line of sight, vector, and/or path.

On page 88, please replace the paragraph beginning at line 19 with the following rewritten paragraph:

The LED support ~~800~~ 801 may alternatively be formed of a plurality of first

LED's ~~802~~ 803 having the same or different wavelengths of emitted visible or nonvisible light. The LED support ~~800~~ 801 may ~~then~~ also be organized into specific sectors ~~810~~ 811 of select first LED illumination sources ~~802~~ 803 of the same or different wavelengths of visible or non-visible light.

On page 88, and continuing onto page 89, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The LED support ~~800~~ 801 and the first LED light sources ~~802~~ 803 are electrically coupled to a power source ~~812~~ 813 as regulated through a controller ~~814~~ 815. The power source ~~812~~ 813 may be a low voltage, low current power supply and may include a rechargeable battery capable of receiving recharge through coupling to a solar energy cell ~~816~~ 817. Other sources of electrical power may be suitable substitutes herein. The controller ~~814~~ 815 regulates and/or modulates the duty cycle to be exposed to the individual first LED light sources ~~802~~ 803 for the creation of a desired type and/or pattern of warning light signal. The controller ~~814~~ 815 also preferably regulates and/or modulates the duty cycle to be supplied to the individual first LED illumination sources ~~802~~ 803 for the creation of a desired type and/or pattern of SIT-TEL pulsed light signal. ~~The warning signal light and SIT-TEL pulsed light signal may be emitted from the first LED light sources 802 simultaneously and/or independently of each other.~~ A variable duty cycle may also be applied to the first LED light sources ~~802~~ 803 through the controller ~~814~~ 815 as well as regulation of the type or combination of distinct types of light signals as earlier described. In addition, the same types and/or combinations of types of light signals whether warning light signals and/or SIT-TEL pulsated light signals, may be provided simultaneously and/or independently of each other within different sectors ~~810~~ 811 of the LED light support ~~800~~ 801.

On page 89, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

The LED light support ~~800~~ 801 may include an almost infinite variety of individual first LED light sources ~~802~~ 803 as configured in any combination, sector, color, and/or pattern. A request by an operator for a particular color or wavelength of LED pulsating or warning light signal may therefore be provided through the controller ~~814~~ 815, which selectively

illuminates a desired and recognizable combination of individual first LED light source ~~802~~ 803 wavelengths to provide the composite ~~desired~~ light signal. The combination of independent first LED illumination sources ~~802~~ 803 by the controller ~~814~~ 815 is particularly useful in the creation of white light which may be formed of a plurality of individual LED light ~~sources~~ source ~~802~~ 803 wavelengths, where each individual first LED light source ~~802~~ 803 is an independent channel of pulsed light. A composite white light signal may therefore include in excess of 100 channels of independent and distinct wavelengths of pulsed first LED light sources ~~802~~ 803 where each wavelength of first LED light sources ~~802~~ 803 is pulsating at an approximate rate of 1000 pulses per second. The rapid rate of pulsation for the first LED light sources ~~802~~ 803, produces a staggering volume of information for receipt by a second controller ~~826~~ 827. Naturally, a significant number of second receivers ~~822~~ 823 may be required to receive all transmitted information. It may also be preferable to have the number of second receivers ~~822~~ 823 equal or exceed the number of wavelength channels utilized by the first LED illumination sources ~~802~~ 803 for transmission of information.

On page 89, and continuing onto page 90, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

The LED light support ~~800~~ 801 also includes a first receiver ~~818~~ 819 which is electrically coupled to a converter ~~820~~ 821. The converter ~~820~~ 821 is coupled to the controller ~~814~~ 815. The first receiver ~~818~~ 819 is capable of recognizing and receiving a SIT-TEL signal which may be transmitted either as a directional and/or non-directional pulsated light signal. The operational range for the first receiver ~~818~~ 819 and the first LED illumination sources ~~802~~ 803 is dependent upon the environmental conditions such as humidity, air pressure, air temperature, and pollution factors. It is anticipated that in good environmental conditions that the effective operational range of the first receiver ~~818~~ 819 and first LED illumination sources ~~802~~ 803 will exceed one half mile and extend to three miles or more.

On page 90, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

The first receiver ~~818~~ 819 is constructed and arranged to receive SIT-TEL LED pulsed light signals as generated by a second independent LED illumination source(s) ~~828~~ 829

having a recognizable wavelength. The received SIT-TEL LED pulsated light signal is converted into a digital signal by a converter ~~820~~ 821 for communication to the controller ~~814~~ 815. The controller ~~814~~ 815 receives the converted digital signal for processing and extraction of transmitted information to respond to an interrogation or information transmission request. The controller ~~814~~ 815 continues to process the received digital signal for preparation of an appropriate responsive signal. At the direction of an individual the controller ~~814~~ 815 then communicates the responsive signal to the converter ~~820~~ 821 which in turn converts the responsive signal to a series of pulses for transmission from the first LED illumination source ~~802~~ 803 as a responsive pulsed SIT-TEL LED optical free space communication signal.

On page 90, please replace the paragraph beginning at line 18 with the following rewritten paragraph:

The responsive SIT-TEL LED pulsed light signal in turn is received by a second receiver ~~822~~ 823 as coupled to a second converter ~~824~~ 825, second controller ~~826~~ 827, and second LED illumination device ~~828~~ 829. The second receiver ~~822~~ 823, second converter ~~824~~ 825, and the second controller ~~826~~ 827 proceed to translate and process the SIT-TEL pulsed light signal containing communications which originated from the first controller ~~814~~ 815.

On page 90, and continuing onto page 91, please replace the paragraph beginning at line 23 with the following rewritten paragraph:

The first controller ~~814~~ 815 and the first LED individual light sources ~~802~~ 803 as well as the second controller ~~826~~ 827 and second LED illumination sources ~~828~~ 829 are constructed and arranged to regulate the transmission of an infinite variety of SIT-TEL pulsed LED free space optical light signals. The types of SIT-TEL LED pulsed optical light signals may include but are not necessarily limited to pre-stored characters, numbers, and/or words, and/or terms as identified by an assigned combination of long or short pulses or bar code type or form of signal 803.1, 803.2, 803.3, 803.1a, 803.1b, 803.1c, 803.2a, 803.2b, 803.2c, 803.3a, 803.3b, and 803.3c. (FIGS. 86-87C.) The pulsed LED light signals may be generated so that each pulsed LED light signal has an identical duration as a portion of a SIT-TEL communication. Alternatively, the pulsed LED light signals may have different durations. Any number of pulsed light signals having the same or different durations may be grouped into a signal packet. Each

packet or combination of signals may be assigned a character, number, or other information as data within a memory which may be integral to a controller ~~814~~ 815. Individual packets of grouped pulsed LED SIT-TEL light signals may be combined into a message, word, and/or character for processing and/or translation by a second controller ~~826~~ 827 for communication of information to an individual. The first illumination sources ~~802~~ 803 and the second illumination sources ~~828~~ 829 are constructed and arranged to emit and/or transmit thousands of pulses of LED light within a time period of approximately one second. The pulsation rate for the SIT-TEL LED pulsed light signal is not observable to the unaided eye. The volume of available combinations of SIT-TEL LED pulsed light signals within a very short period of time enables transmission of a significant amount of information subject to processing via a first or second controller ~~814~~ 815, ~~826~~ 827.

On page 91, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

The first and second controllers ~~814~~ 815, ~~826~~ 827 respectively, each include a memory having stored software and data files for processing of received SIT-TEL LED pulsed light ~~signal~~ signals. The memory and available stored data facilitate the immediate and automatic recognition of an environmental condition, parameter, or generation of a pre-stored SIT-TEL pulsed light response. One example of recognition of an environmental condition or situation is when information is desired from a source having an interrogating or second controller ~~826~~ 827 which ~~request~~ requests through a SIT-TEL pulsed light signal the identity and/or status of a first controller ~~814~~ 815. The responsive first controller ~~814~~ 815 upon receipt of a verified interrogation SIT-TEL signal request initiates a responsive SIT-TEL LED pulsed light signal which communicates the identification and/or other requested information. A second example of recognition of an environmental condition and/or situation is when a first receiver ~~818~~ 819 encounters a continuously emitted SIT-TEL LED pulsed light signal which may function as a warning to trigger an audible or visual alarm to the first controller ~~814~~ 815, to minimize safety risks to individuals.

On page 91, and continuing onto page 92, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

A first controller ~~814~~ 815 and a second controller ~~826~~ 827 each preferably contain software establishing a recognition or handshake protocol for acknowledgment, receipt, and transmission of information optically through free space SIT-TEL LED pulsed light signals. The handshake protocol initiates upon the first receiver ~~818~~ 819 acknowledging being tagged, or receiving an initial pulsed SIT-TEL LED light signal from a second controller ~~826~~ 827. A responsive signal is then generated by the first controller ~~814~~ 815 for transmission to the second receiver ~~822~~ 823. An acknowledgment message is returned by the second controller ~~826~~ 827 to the first receiver ~~818~~ 819. A preselected pattern of acknowledgments are interchanged to verify readiness for transmission and receipt of desired information through the transmission of free space pulsed SIT-TEL LED light signals. Following transmission of the demanded information and/or data, additional verification and/or acknowledgment transmissions may occur between the first receiver ~~818~~ 819 and the second receiver ~~822~~ 823 prior to the termination of contact through the use of a sign off protocol.

On page 92, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

The first and second receivers ~~818~~ 819, ~~822~~ 823 are constructed and arranged to recognize certain wavelengths of incoming pulsed SIT-TEL LED light signals. The first and second receivers ~~818~~ 819, ~~822~~ 823 may be constructed of a plurality of photo detectors, photo diodes, optical transceivers, and/or photo detecting elements to simultaneously, individually, and/or sequentially receive transmissions of SIT-TEL LED pulsed light signals of differing wavelengths. The first and second controllers ~~814~~ 815, ~~826~~ 827 respectively may also be coupled to an automatic and/or manual scanner ~~830~~ 831 or dial which may be manipulated to tune into another wavelength of transmitted SIT-TEL LED pulsed light signals. For example, an individual observing a ~~predominately~~ predominantly red SIT-TEL LED light signal who is expecting to receive a transmitted pulsed SIT-TEL LED light signal may dial and/or tune a first receiver ~~818~~ 819 to a red spectrum wavelength to locate the signal. Similarly, adjustments are available for other observed colors. The scanning for pulsed SIT-TEL LED light signals may also be automated by the scanner ~~830~~ 831. The scanner ~~830~~ 831 and/or first and second receivers ~~818~~ 819, ~~822~~ 823 are constructed and arranged to independently and/or simultaneously receive directional and/or non-directional pulsed SIT-TEL LED light signals for transmission and

communication of information between geographically removed LED illumination sources ~~802~~ 803, ~~828~~ 829.

On page 92, and continuing onto page 93, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

The use of a combination and/or independent warning light signal and/or pulsated light signal is particularly applicable for use in motor vehicles. The light support ~~800~~ 801 may be integral and/or fixed to a light bar ~~832~~ 833 as engaged to a motor vehicle or emergency vehicle ~~834~~ 835. During use of the SIT-TEL communications system, where information is transmitted upon carrier pulsated free space SIT-TEL LED light signals, the second receiver ~~822~~ 823, second controller ~~826~~ 827, and second LED illumination devices ~~828~~ 829 may be integral and/or attached to the light bar ~~832~~ 833. The first receiver ~~818~~ 819, first controller ~~814~~ 815, and first LED illumination sources ~~802~~ 803 are preferably integral with and/or affixed to a motor vehicle license plate ~~836~~ 837. The license plate ~~836~~ 837 may include a recessed area ~~838~~ 839 or a transmission opening ~~840~~ 841 which is adapted to receive the first receiver ~~818~~ 819 and the first LED illumination sources ~~802~~ 803. A transparent cover ~~842~~ 843 preferably traverses the recessed area ~~838~~ 839 and/or transmission opening ~~840~~ 841 to protect the first receiver ~~818~~ 819 and first LED illumination sources ~~802~~ 803 from contamination during use of the SIT-TEL pulsated light system. A battery ~~844~~ 845 and/or power connector ~~846~~ 847 may be coupled to the first controller ~~814~~ 815 which is located upon the non-exterior face of the license plate ~~836~~ 837. The battery ~~844~~ 845 may be a lithium battery having an approximate life span of five years or more. Alternatively, the battery ~~844~~ 845 may be rechargeable through the use of solar powered cells or other electrical source. Further, the power connector ~~846~~ 847 may be coupled to a vehicle electrical system for the provision of power to the first controller ~~814~~ 815, first receiver ~~818~~ 819, and first LED illumination sources ~~802~~ 803. The transparent cover ~~842~~ 843 is formed of a sufficiently sturdy transparent material to prevent tampering and/or disconnection of the first receiver ~~818~~ 819 or the first LED illumination sources ~~802~~ 803.

On page 93, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

The first LED illumination sources ~~802~~ 803, first controller ~~814~~ 815, and first

receiver ~~818~~ 819 as integral to the license plate ~~836~~ 837 are conspicuously positioned upon a motor vehicle which is potentially subject to interrogation by law enforcement officers within law enforcement vehicles.

On page 93, and continuing onto page 94, please replace the paragraph beginning at line 21 with the following rewritten paragraph:

The first controller ~~814~~ 815 may additionally be electrically connected to a first signaling device ~~848~~ 849 which may be attached to the dashboard of the motor vehicle. (FIG. 81.) Alternatively, the first signaling device ~~848~~ 849 may be wired into a radio for a motor vehicle. The first signaling device ~~848~~ 849 is constructed and arranged to receive a signal from the first controller ~~814~~ 815 during situations in which the first receiver ~~818~~ 819 has detected a traffic warning message as generated by a SIT-TEL pulsed LED signal emitted from the second LED illumination devices ~~828~~ 829 as generated by a second controller ~~826~~ 827 within a law enforcement vehicle ~~834~~ 835. The first signaling device ~~848~~ 849 thereby provides a visual LED signal 1042 to the occupants of a motor vehicle as to the presence of a police officer necessitating clearance of a roadway. (FIG. 82.) Alternatively, the first signaling device ~~848~~ 849 may be coupled and/or electrically connected to the radio of a motor vehicle to provide an interrupt switch. Activation of the interrupt switch may cause termination of internal radio or stereo transmissions within a passenger vehicle. Alternatively, the activation of the interrupt switch may permit activation of a database having pre-recorded oral communications for broadcast over a speaker system to orally advise a passenger of a motor vehicle as to the presence of an emergency situation necessitating the clearance of a roadway. Alternatively, during periods when a motor vehicle radio has not been activated, the first controller ~~814~~ 815 may activate the first signaling device ~~848~~ 849 to engage a motor vehicle radio for the provision of ~~a~~ an audible warning alarm. The first controller ~~814~~ 815 may additionally include prerecorded voice recognition messages which may be initiated by the first controller ~~814~~ 815 upon receipt of an appropriate signal from the second LED illumination devices ~~828~~ 829. The audible and/or oral prerecorded signal may advise an occupant of a motor vehicle as to the presence of an emergency situation through oral communication as generated over the radio system of the vehicle. The first signaling device ~~848~~ 849 may also emit a verification buzzing or alarm signal when activated by the first controller ~~814~~ 815 to warn an occupant of a motor vehicle as to the existence of an

emergency situation.

On page 94, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

The first receiver ~~818~~ 819 may be formed of a relatively flat and thin rectangular sensor ~~850~~ 851 which may be positioned adjacent to a window within the interior of a motor vehicle. The first receiver ~~818~~ 819 is preferably electrically connected to both the first controller ~~814~~ 815 and the first signaling device ~~848~~ 849. The first receiver ~~818~~ 819 is preferably constructed and arranged to receive pulsed SIT-TEL LED optical signals for transmission to the first converter ~~820~~ 821 for communication to the first controller ~~814~~ 815 for processing. The first receiver ~~818~~ 819 may additionally be constructed and arranged to receive a polarized pulsed SIT-TEL LED light signal as may be reflecting from the interior windows of a motor vehicle. The first receiver ~~818~~ 819 may be placed at any location about a motor vehicle and is not limited to affixation to a license plate ~~836~~ 837. The first receiver ~~818~~ 819 is preferably placed at a location about a motor vehicle which is easily accessible to transmitted directional and/or non-directional pulsed SIT-TEL light emitting diode signals as generated by the second LED illumination devices ~~828~~ 829.

On page 94, and continuing onto page 95, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

The second LED illumination device ~~828~~ 829, second controller ~~826~~ 827, second receiver ~~822~~ 823, and second converter ~~824~~ 825 are generally attached or integral to an emergency vehicle such as a police squad automobile. The second LED illumination device ~~828~~ 829 and second receiver ~~822~~ 823 may be attached to a light bar ~~832~~ 833 at a central and/or other convenient location. The second controller ~~826~~ 827 may be positioned to the interior of the light bar ~~832~~ 833 or located within the interior of the emergency vehicle or police squad automobile. A power supply such as a battery may be integral to the light bar ~~832~~ 833. Alternatively, power may be provided to the components of the second controller ~~826~~ 827, second receiver ~~822~~ 823, second converter ~~824~~ 825, and second LED illumination devices ~~828~~ 829 through the use of a removable power cord coupled to a receptacle such as a cigarette lighter, or may be hardwired to the electrical system of the emergency vehicle. The low voltage requirements for the pulsed SIT-

TEL LED signaling system does not adversely affect the power parameters for the emergency vehicle. The ~~emergency vehicle~~ first signaling device 849 may also include a switch ~~862~~ 863 disposed at a convenient location within the interior of the emergency vehicle for activation of the pulsed SIT-TEL LED signaling and/or interrogation system. A scanner ~~864~~ 865 may also be coupled to the second controller ~~826~~ 827 to facilitate recognition of the wavelength of the pulsed SIT-TEL LED light.

On page 95, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

A selection switch ~~866~~ 867 may also be coupled to the second controller ~~826~~ 827 to regulate the emission of focused optics and/or wide angle directional or non-directional pulsed SIT-TEL LED light signals from the second LED light sources ~~828~~ 829. A wavelength switch ~~868~~ 869 may also be coupled to the second controller ~~826~~ 827 to enable adjustment or change to the wavelength of emitted pulsed SIT-TEL LED light signals. An officer and/or law enforcement personnel may therefore select from an almost infinite variety of visible and/or non-visible light signals. The second controller ~~826~~ 827 is preferably additionally electrically connected to a terminal ~~870~~ 871 within an emergency vehicle ~~834~~ 835 and/or police squad automobile to visually generate information observable on a screen or display by an officer. (FIG. 81.)

On page 95, and continuing onto page 96, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

Alternatively, the second LED illumination device ~~828~~ 829 and/or second receiver ~~822~~ 823 may alternatively be incorporated into a hand held unit 852 for use in specific targeting of motor vehicles by law enforcement personnel. (FIG. 85.) The hand held unit 852 includes a hand grasping portion 854 and a main body portion 856. A trigger 858 may be included in the handle grasping portion 854. The trigger 858 enables a law enforcement officer to instantaneously and selectively activate the generation of a pulsed SIT-TEL LED light signal from the second LED illumination device ~~828~~ 829 to initiate interrogation of a first controller ~~814~~ 815 and first receiver ~~818~~ 819. The main body portion 856 includes a forward end ~~860~~ 861 which is the location of the second LED illumination device ~~828~~ 829 and second receiver ~~822~~ 823. The second controller ~~826~~ 827, second converter ~~824~~ 825, and/or battery ~~844~~ 845 may be

located in either the main body portion 856 and/or the handle grasping portion 854 dependent upon space availability considerations.

On page 96, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

Power may be provided to the hand held unit 852 through the use of a battery, power cord, having an adapter for coupling to a cigarette lighter receptacle, and/or directly hard wire connected to the electrical system of a motor vehicle ~~834~~ 835.

On page 96, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The handle grasping portion 854 and/or the main body portion 856 may also include a selection switch ~~866~~ 867 and/or wavelength switch ~~868~~ 869 as earlier described. A scanner ~~864~~ 865 may also be integral or connected to the main body portion 856 for identification and recognition of pulsed SIT-TEL LED light signals to be received by the receiver ~~822~~ 823. The hand held unit 852 and second LED illumination devices ~~828~~ 829 may also generate focused optics and/or a wide angle directional or non-directional pulsed SIT-TEL LED light signals within the visible or non-visible spectrum. The hand held unit 852 is also electrically connected to a terminal ~~870~~ 871 within an emergency vehicle ~~834~~ 835 and/or police squad to visually generate information observable on a screen by an officer.

On page 96, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

The features as earlier identified for the pulsed SIT-TEL LED light signal system as integral to a light bar ~~832~~ 833 and/or hand held unit 852 are equally applicable to a stationary unit ~~872~~ 873. It is anticipated that a stationary unit ~~872~~ 873 is releasably mounted to a dashboard of an emergency vehicle through the use of brackets ~~874~~ 875. The stationary unit ~~872~~ 873 may be provided with or without a hand grasping portion 854. In one embodiment a handle grasping portion 854 may also be omitted and/or eliminated where the trigger 858, switch ~~862~~ 863, select switch ~~866~~ 867, and/or wavelength switch ~~868~~ 869 are preferably located on the main body portion 856, at a location convenient for manipulation by an officer. A scanner ~~864~~ 865 as earlier described may also be integral or releasably coupled to the stationary unit ~~872~~ 873. The

stationary unit ~~872~~ 873 has the capability and flexibility to recognize and emit an almost infinite variety of pulsed SIT-TEL LED light signals. Further, the stationary unit ~~872~~ 873 may also be connected and/or releasably coupled to a terminal ~~870~~ 871 integral to an emergency vehicle ~~834~~ 835 for a visual display of information representative of translated received pulsed SIT-TEL LED light signals.

On page 96, and continuing onto page 97, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

The license plate ~~836~~ 837 and SIT-TEL signaling system may be encapsulated within a protective cover ~~842~~. Alternatively, the rear face of the license plate ~~836~~ 837 may be encapsulated to protect the first controller ~~814~~ 815, first receiver ~~818~~ 819, and first LED illumination sources ~~802~~ 803 from damages caused by undesirable moisture, dirt, dust, and/or other foreign particles.

On page 97, please replace the paragraph beginning at line 3 with the following rewritten paragraph:

The rapid pulsation of electrical energy through the first LED light sources ~~802~~ 803 potentially may generate undesirable excessive heat. A heat sink for the license plate ~~836~~ 837 is generally not required because the duration of illumination of a pulsed SIT-TEL LED light signal, is anticipated to be sufficiently short ~~duration,~~ to avoid the build-up of excessive undesirable heat. Alternatively, the license plate ~~836~~ 837 and/or light support ~~800~~ 801 may function as a heat sink to dissipate heat generated by the first LED light sources ~~802~~ 803, during illumination of a pulsed SIT-TEL LED light signal.

On page 97, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

The first LED light sources ~~802~~ 803 and the second LED light sources ~~828~~ 829 are preferably positioned within a culminator and/or a reflector ~~806~~ 807 as earlier described. The angle of the interior face of the culminator ~~806~~ 807 relative to horizontal, and/or the angle of the reflective face of the reflector ~~806~~ 807 relative to horizontal generally imparts a desired amount of focus for the generated pulsed SIT-TEL light signal. The focus of the generated pulsed LED light signal is also impacted by the wavelength selected to be illuminated by the controllers ~~814~~

815, ~~826~~ 827 respectively.

On page 97, and continuing onto page 98, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

A SIT-TEL pulsed light signal is used independently and/or in combination with an observable warning light signal to supplement awareness of an emergency situation. Law enforcement and/or emergency vehicles ~~834~~ 835 frequently utilize sirens to warn motorists as to the existence of an emergency situation. Sirens of the past have increased in decibel volume through increases in applied power. In the past, sirens have been operated by application of approximately 68 watts of power. The amount of power to sirens has significantly increased to 200 to 400 watts. The significant increase in power applied to sirens has been partially in response to the manufacture of quieter automobile interiors which has significantly reduced the volume of exterior road noise. In addition, automotive stereo systems have significantly improved, further reducing a motor vehicle occupants ability to hear an emergency siren. Siren volume has therefore increased to a point where unprotected hearing to individuals may cause injury. It is anticipated that the volume of sirens may be required to be reduced necessitating alternative avenues of communication of information related to the existence of an emergency situation. One solution to improve the recognition of the existence of an emergency situation is to position a first receiver ~~818~~ 819 within the interior of a vehicle. The location of the first receiver ~~818~~ 819 is not critical due to the reflection of the pulsed SIT-TEL LED light signal off the interior windows which will strike the first receiver ~~818~~ 819.

On page 98, and continuing onto page 99, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

It is anticipated that a pulsed SIT-TEL LED light signal may be used in any number of activities to facilitate the performance of law enforcement or emergency duties. The SIT-TEL LED pulsed light signal communication system may be used as an interrogation device upon a targeted motor vehicle. A law enforcement second LED illumination device ~~828~~ 829 may be activated via a switch ~~862~~ 863 and/or trigger 858 to generate a first SIT-TEL LED pulsed light signal to be received by the first receiver ~~818~~ 819 as integral to a license plate ~~836~~ 837 and/or located within a motor vehicle. (FIGS. 69-70.) The targeted first receiver ~~818~~ 819 then

preferably generates an electrical signal to the first converter ~~820~~ 821 for transfer to the first controller ~~814~~ 815. A responsive message is generated by the first controller ~~814~~ 815 for transmission by the first LED illumination sources ~~802~~ 803. The responsive pulsed light signal will include a recognizable pattern of pulsed SIT-TEL LED light which may not be observable by the unaided eye. The responsive pulsed SIT-TEL LED light signal will therefore transfer basic information such as make, model, license plate number, status of license tab registrations, driving after revocation, and/or expiration of insurance, for a tagged and/or interrogated motor vehicle. The responsive SIT-TEL signal received by the second receiver ~~822~~ 823 of the law enforcement vehicle will be processed by the second controller ~~826~~ 827 for coupling to a database and/or microprocessor integral to a terminal ~~870~~ 871 within a police vehicle ~~834~~ 835. Data therefore may be instantaneously retrieved for display to law enforcement personnel related to the likely occupant and/or criminal and/or driving record of the tagged vehicle without the necessity for an officer to close distance to the suspect vehicle to permit unaided observation of the license plate ~~836~~ 837. The speed and ease of access to Department of Motor Vehicle information to aid an officer is therefore significantly enhanced permitting an officer to maintain a desired distance from the targeted vehicle. The use of a pulsed SIT-TEL LED light signal as free space carrier of information eliminates the necessity for a law enforcement vehicle to expend significant economic resources for costly optical aids. The selection of directional or non-directional pulsed SIT-TEL LED signals also permits a law enforcement vehicle to interrogate a significant number and/or virtually all motor vehicles on a roadway to search for a stolen car and/or an abduction where time is of the essence to insure safety to an individual. In addition, a passive search may be activated for the pulsed SIT-TEL light communication system to attempt to identify any motor vehicles within a particular class. The electric coupling to a processor integral to a law enforcement vehicle enables an officer to access a database to check for outstanding warrants for an individual. If information is received concerning an individual which would raise a safety concern for the law enforcement personnel then sufficient time is provided to immediately request backup prior to the initiation of a motor vehicle stop.

On page 99, please replace the paragraph beginning at line 8 with the following rewritten paragraph:

The pulsed SIT-TEL LED illumination system may also be used to enhance

positioning and/or mapping of a travel route for an emergency vehicle ~~834~~ 835 by periodic verification of position locators within a geographic area. This feature may be particularly useful in fire safety applications. The pulsed SIT-TEL LED illumination system also provides to law enforcement personnel immediate verification that a correct vehicle has been tagged for interrogation through the issuance of a responsive pulsed SIT-TEL LED light signal for transmission to and receipt by the second receiver ~~822~~ 823. The accuracy of law enforcement activities is thereby significantly improved.

On page 99, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

The pulsed SIT-TEL LED light signal may also be used as optical pulses to be received by a first receiver ~~818~~ 819 to enter a security code for access to a gated community, garage, and/or secure parking lot. In these instances, the second LED illumination sources ~~828~~ 829 generate a pulsed SIT-TEL LED light signal for receipt by the first receiver ~~818~~ 819 which in turn is coupled to a first controller ~~814~~ 815 and a switch to open an otherwise locked gate. The pulsed SIT-TEL LED light signal may also be used by law enforcement and/or highway personnel to modify illuminated highway signs. A second LED light source ~~828~~ 829 may generate a coded signal for modification of a stationary illuminated street sign for display of a new message.

On page 99, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

The first and second controllers ~~814~~ 815, ~~826~~ 827, preferably decipher a digitized received pulsed light signal so that appropriate action may be initiated. Further, the pulsed LED lighting system may be used to verify speed and/or separation distance from a stationary second light emitting diode illumination source ~~828~~ 829 and second receiver ~~822~~ 823.

On page 99, and continuing onto page 100, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

In an alternative embodiment, a wide angle passive pulsed second SIT-TEL LED illumination signal ~~828~~ 829 may interrogate an automobile for return of abbreviated and/or select information such as expired license plate tabs. The initial pulsed SIT-TEL LED light signal may

therefore be constructed and arranged to request the provision of specific information related to a motor vehicle.

On page 100, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

In an alternative embodiment, the first controller ~~814~~ 815 may be electrically coupled to a motor vehicle speedometer. If the motor vehicle exceeds a certain pre-stored speed then the first controller ~~814~~ 815 may signal the first LED illumination sources ~~802~~ 803 to initially generate an excessive speed signal to be received by a second receiver ~~822~~ 823 integral to a law enforcement vehicle ~~834~~ 835.

On page 100, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

The pulsed SIT-TEL LED light signaling system may also be incorporated into aircraft. (FIG. 71.) A necessity exists for use of the pulsed SIT-TEL LED light signaling system in an aircraft due to the shortage of available radio frequencies and the problems associated with radio frequency communication saturation in air traffic control zones and air traffic interference in controlled air zones. Further, radio interference between geographic areas provides incomplete availability or protection during use of radio frequency air warning systems.

On page 100, and continuing onto page 101, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

In the past, there has generally been two different versions of TCAS where the first version indicates the bearing and relative altitude of an aircraft within a selected range of approximately 10 to 20 miles of another transponder equipped aircraft. Within this first TCAS system a traffic advisory may be issued to identify the intruding aircraft which may permit the increase or decrease of a planes altitude by up to approximately 300 feet. The initial TCAS system does not provide solutions for air anti-collision avoidance, however, the TCAS initial system provides pilots with important information to initiate a course of action to avoid ~~anti-~~ collision. In a second version of TCAS, a pilot is provided with resolution advisories. This TCAS system determines the course of each aircraft and whether the aircraft is climbing, descending, or flying straight and level. The enhanced TCAS system issues resolution advisories

to pilots to execute types of evasive maneuvering necessary to avoid collision. If both aircraft are equipped with the enhanced TCAS system, then the two computers on the respective aircraft offer the conflicting resolution advisories. The non-conflicting resolution advisories prevent course alternations which would effectively cancel anti-collision corrections between the two aircraft which would result in a continued threat.

On page 101, and continuing onto page 102, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The pulsated SIT-TEL LED signaling light system may be incorporated into an aircraft 876. Generally, the pulsated SIT-TEL LED signaling light system will originate from a rotating or flashing beacon 878, which is secured to the exterior of the fuselage of the aircraft 876. The beacon 878, may be fixedly positioned relative to the fuselage and/or adjustably repositionable thereon. Certain aircraft 876, may utilize one or more beacons 878, within the pulsed SIT-TEL LED signaling system. Each beacon 878, is formed of a light support ~~800~~ 801, and first LED illumination sources ~~802~~ 803, as earlier described. In addition, the first LED illumination sources ~~802~~ 803, may be positioned within a stationary panel or may be incorporated within a rotational device ~~804~~ 805, as earlier described. Each first LED illumination source ~~802~~ 803, is placed within a culminator assembly ~~806~~ 807, as earlier described. In the event that a stationary LED light support ~~800~~ 801 is utilized within the beacon 878, then a rotatable reflector assembly ~~808~~ 809, may be positioned over and/or adjacent to the LED light support ~~800~~ 801, to facilitate the appearance of rotation. Alternatively, the LED illumination sources ~~802~~ 803, may be selectively illuminated by the first controller ~~814~~ 815, to provide and impart the appearance of rotation for the beacon 878. The LED light support ~~800~~ 801, may be organized into sectors ~~810~~ 811, of individual LED illumination sources ~~802~~ 803, having different wavelengths of emitted light as earlier described.

On page 102, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

The beacon 878, used in conjunction with an aircraft 876, is a replacement illumination source which provides the additional feature of a pulsed SIT-TEL LED optical signaling system which may be generated at the same time as the emission of a visible light

signal from the beacon 878. The beacon 878, may therefore, incorporate dual functionality of a visible illumination source and a nonvisible pulsed signaling system for transmission of information between the first LED illumination sources ~~802~~ 803, and a second removed receiver ~~822~~ 823.

On page 102, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

The LED light support ~~800~~ 801, as used as a component of the beacon 878, may preferably be cylindrical, octagonal, hexagonal, square, rectangular, and/or oval. In addition, the LED light support ~~800~~ 801, may be formed of flexible circuit boards as earlier described herein. The first LED illumination sources ~~802~~ 803, may be formed of an infinite variety of colors and/or wavelength patterns to facilitate transmission of pulsed SIT-TEL LED light signals. The beacon 878, may also incorporate a strobe illumination source 880, which functions as an anti-collision warning light signal for an aircraft 876. The beacon 878, strobe warning light 880, first LED illumination sources ~~802~~ 803, and any rotational device ~~804~~ 805, are in communication with the first controller ~~814~~ 815, which is constructed and arranged to provide modulated light intensity to the first LED illumination sources ~~802~~ 803. The modulated light intensity is provided to the first LED illumination sources ~~802~~ 803, may increase or decrease the voltage or duty cycle applied to brighten or dim illumination from the beacon 878, at a predetermined rate. Additionally, the first controller ~~814~~ 815, regulates the rate of pulsation of the first LED illumination sources ~~802~~ 803, during the generation of a pulsed SIT-TEL LED light signal.

On page 102, and continuing onto page 103, please replace the paragraph beginning at line 32 with the following rewritten paragraph:

The beacon 878, and/or strobe light signal 880, is designed to supplement and/or replace existing aircraft lighting systems by substituting LED technology for conventional lighting sources. The first controller ~~814~~ 815 is constructed and arranged to continue to offer enhanced light signals and/or any other desired type of lighting signal for use in association with an aircraft 876.

On page 103, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

Enhanced flexibility is provided to an aircraft 876, lighting system through the adjustment of the duration of the duty cycle for the first LED illumination sources ~~802~~ 803 for a pulsation rate which was previously unavailable and unknown for use in association with aircraft 876, and conventional light sources.

On page 103, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

Traditionally, the beacon 878, emits a light source having a red wavelength. The port wing of an aircraft 876, also traditionally emits a red light source. The starboard wing of an aircraft 876, traditionally emits a green light source. The fuselage of an aircraft 876, traditionally emits a white light source. A white light source is generally utilized for landing, ground, and/or taxi lights for an aircraft 876. The port and starboard wing, fuselage, and landing, ground, and/or taxi lights may be LED illumination sources ~~802~~ 803, which in turn may be utilized as a portion of the pulsated SIT-TEL LED signaling system for an aircraft 876. In addition, the beacon 878, strobe, port and starboard wings, fuselage, landing, taxi, and/or ground lights may be incorporated within filters and/or other devices to emit a polarized directional optical light signal.

On page 103, please replace the paragraph beginning at line 19 with the following rewritten paragraph:

The pulsated light signals as emitted from the first LED illumination sources ~~802~~ 803, and regulated by the first controller ~~814~~ 815, may be either encoded and/or encrypted for receipt by the second receiver ~~822~~ 823, located at a remote position relative to the aircraft 876. The pulsed SIT-TEL LED illumination signals as generated by the first LED illumination sources ~~802~~ 803, communicate information as to the identity of the aircraft 876, and/or the position of an aircraft 876, relative to an obstacle and/or tower.

On page 103, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

Generally, an observable light signal may be generated from the first LED illumination sources ~~802~~ 803, as an anti-collision light source, at a rate of 20 to 60 cycles per minute. A non-observable pulsated light source may be generated by the first LED illumination signals ~~802~~ 803, at a rate of 80 hertz and preferably 100 hertz or greater. The pulsed SIT-TEL

LED light signal as transmitted by the first LED illumination sources ~~802~~ 803, may be prerecorded, processed, and/or converted in real time where a combination of pulsed sequences represents characters, words, and/or numerals for communication of information via a pulsed light signal.

On page 104, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

An operator may select from a number of pre-stored pulsed light combinations representative of information to be communicated via the first controller ~~814~~ 815. Alternatively, real time communications may be transmitted by pulsed light signal via the use of a keyboard or voice activated system where the controller ~~814~~ 815, translates the information into combinations of pulsed light signals for transmission to a second receiver ~~822~~ 823. A second receiver ~~822~~ 823, preferably receives the generated pulsed LED signals for initial processing and for transfer to a second controller ~~826~~ 827, for communication to an individual or system.

On page 104, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

The first controller ~~814~~ 815 is also constructed and arranged to continue communication of pulsed light signals containing information such as call sign, type, destination, flight plan, and/or other pre-programmed information following an incident or mishap for an aircraft 876.

On page 104, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

The first controller ~~814~~ 815, is programmed ~~and~~ to include a sufficient level of sophistication to eliminate recognition of false light signals which may occur from a source such as sunlight in analyzing and transmitting pulsed LED light signals. The controller ~~814~~ 815 may also include a handshake protocol to assist in recognition of a pulsed SIT-TEL LED light signal. The handshake protocol may include an alternating pre-set pattern of ultra high speed pulsating SIT-TEL LED light signals of the same or different wavelengths as may be transmitted in a pre-determined and recognizable combination prior to the transmission of information between a first controller ~~814~~ 815, and a second receiver ~~822~~ 823. The second controller ~~826~~ 827, is preferably

constructed and arranged to search for and focus upon pre-set patterns of pulsed SIT-TEL LED illumination signals to finalize the handshake recognition protocol for elimination of interference light signals. The controller ~~814~~ 815, may also include any number of filters which may be manipulated by a pilot for attachment to the first receiver ~~818~~ 819, for elimination of undesirable light signals.

On page 105, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

The first controller ~~814~~ 815, is positioned onboard proximate to the control panel of an aircraft 876, for regulation and transmission of information and/or data via the first LED illumination sources ~~802~~ 803. The controller ~~814~~ 815, receives converted pulsed SIT-TEL LED light signals for processing to communicate information to a pilot and/or air traffic controller. The controller ~~814~~ 815 preferably regulates the transmission of data via pulsed SIT-TEL LED light signals for transmission to other aircraft and/or tower optical receivers ~~822~~ 823. The initiation of the pulsed SIT-TEL LED signaling light system may occur at any time as selected by a pilot. Alternatively, the emission of pulsed SIT-TEL LED light signals may be continuous.

On page 105, and continuing onto page 106, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The LED support ~~800~~ 801, as used within the stationary beacon 878, may include any number of individual first LED illumination sources ~~802~~ 803, each having a different wavelength. Within the LED support ~~800~~ 801, individual first LED illumination sources ~~802~~ 803, may be collected within a specific region and/or sector ~~810~~ 811 and controlled as a group by the controller ~~814~~ 815. Any number of collections, groups, and/or sectors ~~810~~ 811 of first LED illumination sources ~~802~~ 803 may be provided where each collection, group, and/or sector ~~810~~ 811 is constructed and arranged to provide either a different and distinct warning light signal and/or a different and distinct pulsed SIT-TEL LED light signal. In addition, the controller ~~814~~ 815, is preferably constructed and arranged to selectively illuminate individual first LED illumination sources ~~802~~ 803, and/or different sectors ~~810~~ 811 for the provision of any desired combination of warning light signals and/or pulsed SIT-TEL LED light signals. The controller ~~814~~ 815, may therefore transmit more than a single warning light signal and more than one

pulsed SIT-TEL LED light signal simultaneously.

On page 106, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

A second aircraft 882, and/or ground location 884, may have one or more second receivers ~~822~~ 823, where one of said second receivers ~~822~~ 823, is constructed and arranged to receive a SIT-TEL light signal as generated from each group and/or sector ~~810~~ 811 of LED's ~~802~~ 803. A second receiver ~~822~~ 823, and second controller ~~826~~ 827, may be constructed and arranged to simultaneously receive any number of transmitted pulsed SIT-TEL LED light signals. The second controller ~~826~~ 827, is constructed and arranged to collate, decode, translate, and organize the simultaneously received pulsed SIT-TEL LED light signals into a composite decoded message.

On page 106, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

The speed of transmission and receipt of pulsed SIT-TEL LED light signals enables messages to be encrypted to provide for the secure transmission of information for receipt by a ground location ~~844~~ 884, and/or second aircraft 882. The speed of pulsed SIT-TEL LED light signals may exceed two kilohertz. The most readily apparent limitation on the transmission of encrypted messages relates to the size of the one or more second receivers ~~822~~ 823, for receipt of encrypted pulsed SIT-TEL LED light signals. The second controller ~~826~~ 827, may also include any desired passwords or verification messages to insure the validity of receipt of secure transmissions. Communication of pulsed LED light signals may be terminated by a first controller ~~814~~ 815, at any time when an initial and/or periodic required responsive pulsed SIT-TEL LED light signal is not received by the first receiver ~~818~~ 819, and/or the accuracy of the received SIT-TEL LED light signal is not verifiable.

On page 106, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

Any number of first controllers ~~814~~ 815, and/or second controllers ~~826~~ 827, may be interconnected and/or coupled for transmission and receipt of pulsed SIT-TEL LED light signals. Further, independent controllers ~~814~~ 815, and/or ~~826~~ 827, may be assigned to transmit

and/or translate a portion of a composite pulsed SIT-TEL LED light signal. Security is thereby enhanced due to the partial receipt of a secure transmission by an individual controller ~~814~~ 815, ~~826~~ 827.

On page 106, and continuing onto page 107, please replace the paragraph beginning at line 31 with the following rewritten paragraph:

The second receivers ~~822~~ 823, may be assembled in any array integral to a support ~~800~~ 801, and/or removably positioned therefrom. In one embodiment, a circular and/or octagonal array ~~886~~, may be proximate to, or integral with, the light support ~~800~~ 801. ~~In addition, one array 886.~~ Each array ~~886,~~ includes at least one second receiver ~~822~~ 823, on each face of the octagonal array ~~886~~. Alternatively, a plurality of second receivers ~~822~~ 823, may be adjacent to each other about the circumference of a circular array ~~886~~.

On page 107, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

Each array ~~886~~ of second ~~receptors~~ receivers ~~822~~ 823 is interfaced within an aircraft 876 TCAS anti-collision system for detection of pulsed SIT-TEL LED light signals. It is desirable to determine whether a transmitted pulsed SIT-TEL LED light signal is occurring in a crossing direction relative to the array ~~886~~, where the transmitted SIT-TEL LED light signal is sequentially detected and/or tracked by adjacent second ~~receptors~~ receivers ~~822~~ 823. If sequential detection by the second ~~receptors~~ receivers ~~822~~ 823, occurs, then a second aircraft 882, is pursuing a crossing pattern relative to the first aircraft 876, minimizing risk of collision. Alternatively, if a single second receiver ~~822~~ 823, or group of receivers ~~822~~ 823, continuously receives a pulsed SIT-TEL LED light signal and no sequential tracking is detected, then it is likely that the second aircraft 882, is on a constant bearing decreasing range course necessitating an anti-collision warning. A visual and/or audible alarm may be provided by the second controller ~~826~~ 827, in the event that the second ~~receptors~~ receivers ~~822~~ 823, and/or group of second ~~receptors~~ receivers ~~822~~ 823, continuously receive a transmitted SIT-TEL LED pulsed light signal for a period of time exceeding approximately three to five seconds. The second controller ~~826~~ 827, may be programmed to include any desired period of time as a threshold prior to triggering of the visual and/or audio warning within the aircraft TCAS system advising of a

constant bearing decelerating range second aircraft 882.

On page 107, please replace the paragraph beginning at line 22 with the following rewritten paragraph:

The second controller ~~826~~ 827, may include wavelength selection devices such as dials and/or scanners ~~830~~ 831 to continuously search for transmitted pulsed SIT-TEL LED light signals. Alternatively, the second controller ~~826~~ 827, may be coupled to a key pad 888, which may be used by a pilot to select an individual wavelength for a pulsed SIT-TEL LED light signal. (FIG. 84.) Alternatively, each of the second ~~receptors~~ receivers ~~822~~ 823, may be sensitive for receipt of pulsed SIT-TEL LED light signals having different wavelengths. The second ~~receptors~~ receivers ~~822~~ 823, preferably are flexible to receive a pulsed SIT-TEL LED light signal whether wavelength specific and/or source sensitive.

On page 107,and continuing onto page 108, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

The alarm 890, triggered by the second controller ~~826~~ 827, may advise a pilot by reciting terms such as "warning" and may further provide a direction of the received signal to initiate investigation to avoid collision. In this embodiment, the individual second ~~receptors~~ receivers ~~822~~ 823, are each associated with a pre-stored site within the second controller ~~826~~ 827. The receipt of a pulsed SIT-TEL LED light signal may therefore be traced by the second controller ~~826~~ 827, to a second ~~receptor~~ receiver site ~~822~~ 823, to indicate the general direction of the source of the pulsed SIT-TEL LED light signal to enhance investigation by a pilot. Each second ~~receptor~~ receiver ~~822~~ 823, may be assigned a different site especially when two or more arrays ~~886~~, are utilized on an aircraft 876.

On page 108, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

In general, the beacon 878, strobe light source 880, and/or aircraft lighting system receive power from the main power source for an aircraft. In addition, the beacon 878, strobe light source 880, and/or aircraft lighting system may be coupled to a backup battery or power source ~~892~~, transported within the interior of the aircraft 876. The backup battery source ~~892,~~ may additionally include a rechargeable feature through the use of a solar power cell.

On page 108, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

In the event of an emergency survival situation frequently the main power supply for an aircraft 876, is unavailable to provide power to a beacon 878, position lights, strobe 880, and/or aircraft lighting system. In this instance the battery for the aircraft may be utilized to provide power to the LED beacon 878, strobe 880, and/or aircraft lighting system to continue to provide illumination to identify the coordinates and/or location of the aircraft 876. The reduced power and/or current requirements for the LED beacon 878, position lights, strobe 880, and/or aircraft lighting system prolong the useful life of the aircraft battery to approximately two to three days. A ~~The~~ backup battery ~~892,~~ transported within the interior of the aircraft 876, may then be coupled to the beacon 878, strobe 880, and/or aircraft lighting system to provide power once the main aircraft battery has been depleted. The backup battery ~~892,~~ is then anticipated to provide power to the beacon 878, strobe 880, and/or aircraft lighting system for an additional period of time of approximately two to three days prior to recharge. The inclusion of a solar cell may enable continuous recharge of the second battery ~~892,~~ for provision of power to the beacon 878, strobe 880, and/or aircraft lighting system.

On page 108, and continuing onto page 109, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

The rotating beacon 878, strobe 880, and/or aircraft lighting system may be encased within waterproof enclosures to facilitate continuous operation in adverse conditions. In addition, the beacon 878, strobe 880, and/or aircraft lighting system may further be coupled to an accelerometer which senses aircraft 876, deceleration rates beyond expected parameters. An accelerometer activates the emergency beacon and may initiate a pulsed SIT-TEL LED light signal of preprogrammed information related to aircraft call sign, type of craft, and destination once an unacceptable deceleration rate is detected. The transmission of pulsed SIT-TEL LED light signals thereby augments the current emergency locator transmitter signals for identification of the location of a downed aircraft 876.

On page 109, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

The systematic information transfer through encrypted/pulsed light (SIT-TEL) system as engaged to an airport tower 894, and/or obstacle 896, is formed of a light support ~~800~~ 801, having first LED illumination elements ~~802~~ 803, as earlier described. The light support ~~800~~ 801, may be attached to a rotational device ~~804~~ 805 for rotation where the light support may include rotational reflectors ~~808~~ 809, as earlier described. Alternatively, a controller ~~814~~ 815, may provide modulated light intensity in association with selective illumination of first LED light sources ~~802~~ 803, to generate the appearance of rotation.

On page 110, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The controller ~~826~~ 827, as included within an aircraft 876, may include voice recognition/activation software which may interpret received digital impulses for conversion to audible voice messages to be emitted from a speaker integral to the cockpit. The controller ~~826~~ 827, preferably interprets pulsed LED light signals received from the second receiver ~~822~~ 823, for transmission of alarms such as noises, lights, and/or voices to a pilot related to air obstacles 896.

On page 110, and continuing onto page 111, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

An aircraft 876, may further include the second LED illumination sources ~~828~~ 829, for transmission of the SIT-TEL light signals to the first ~~receptor~~ receiver ~~818~~ 819, integral to the obstacle 896, and/or tower 894. The first controller ~~814~~ 815, may receive and process a reply message from the second controller ~~826~~ 827, to record data such as the aircraft identification, time, and date. In addition, the plurality of first receivers ~~818~~ 819, set at different wavelengths may be used. The modulated reduced duty cycle at certain LED wavelengths may function as a distance indicator relative to the obstacle 896. For example, a first wavelength may be selected where a successful handshake protocol between the first LED illumination sources ~~802~~ 803, and the second ~~receptors~~ receivers ~~822~~ 823, and the return signal from the second LED illumination sources ~~828~~ 829, for receipt at the first ~~receptors~~ receivers ~~818~~ 819, indicate an approximate first distance of three miles between the aircraft 876, and the obstacle 896. A selected different wavelength emitted from the first LED illumination sources ~~802~~ 803 at a reduced modulated duty cycle as regulated by controller ~~814~~ 815, may be recognized by the

second ~~receptors~~ receivers ~~822~~ 823, only when the distance between the obstacle 896, and the aircraft 876, has been reduced to a distance of two miles or less. The successful handshake protocol related to the second wavelength emitted by the first LED illumination sources ~~802~~ 803, indicates that the aircraft 876, has closed distance with respect to the obstacle 896, by approximately one mile. Additionally, many features may be included within successive wavelengths to warn the second controller ~~826~~ 827, and aircraft 876, as to the proximity to a hazard and/or obstacle 896. The warnings may be audible alarms, visual LED lights, and/or voice signals. A number of wavelengths may be selected for emission from the first LED illumination sources ~~802~~ 803, and modulated and successively reduced duty cycle to function as distance indicators relative to an obstacle 896. In addition, for each successive pulsed LED light signal at a specific wavelength having reduced duty cycle, the warning message included within the pulsed LED light signal may incrementally escalate. For example, the three mile warning may be relatively passive. The two mile warning may be more severe in flashing lights and buzzing audible signals. The two mile warning may also transmit to a pilot harassing warning signals and the one mile warning may be quite obnoxious. In addition, each successive wavelength having reduced modulated duty cycle intensity for the first LED illumination sources ~~802~~ 803, may be set at a different repetitive cycle. For example, the three mile warning signal may repeat every 15 seconds. The two mile warning signal may repeat every seven seconds, and the one mile warning signal may continuously repeat.

On page 111, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

The first controller ~~814~~ 815, may be programmed to receive a first handshake protocol related to the three mile pulsed LED signal. The first controller ~~814~~ 815, may then trigger the initiation of the second reduced modulated duty cycle wavelength LED light signal from an alternative sector ~~810~~ 811 as compared to the first LED warning light sources ~~802~~ 803, within the support ~~800~~ 801, corresponding to the two mile warning. The controller ~~814~~ 815, upon recognition of a second handshake protocol related to the second wavelength may then initiate transmission of the third reduced modulated duty cycle wavelength LED light signal from another alternative sector ~~810~~ 811 of the first LED light sources ~~802~~ 803 within the support ~~800~~ 801, corresponding to the one mile warning.

On page 111, please replace the paragraph beginning at line 23 with the following rewritten paragraph:

The method for warning an aircraft 876 as to the existence of an obstacle 896, may initiate by the continuous emission of a first warning pulsed LED light signal at a first wavelength from a sector ~~810~~ 811 or portion of an LED light support ~~800~~ 801, by the first LED illumination sources ~~802~~ 803 integral to the obstacle 896.

On page 111, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

The first warning pulsed LED light signal is received by the second ~~receptors~~ receivers ~~822~~ 823, integral to an aircraft 876, where the second controller ~~826~~ 827, upon receipt of the first warning pulsed LED light signal at the first wavelength initiates transmission of a first responsive pulsed LED light signal at the first wavelength to be received by the first ~~receptors~~ receivers ~~818~~ 819, of the obstacle 896.

On page 111, and continuing onto page 112, please replace the paragraph beginning at line 32 with the following rewritten paragraph:

The first controller ~~814~~ 815, connected to the first ~~receptors~~ receivers ~~818~~ 819, upon receipt of the first responsive pulsed LED light signal continues to transmit at a regular interval the first warning pulsed LED light signal at the first wavelength. In addition, the first controller ~~814~~ 815, generates continued recognition signals by issuance of a first acknowledgment pulsed LED light signal for receipt by the second ~~receptors~~ receivers ~~822~~ 823, integral to the aircraft 876. In addition, the first controller ~~814~~ 815, may initiate the transmission of a second warning pulsed LED light signal at a second modulated reduced duty cycle and second wavelength, from a different sector ~~810~~ 811, or portion of LED support ~~800~~ 801.

On page 112, please replace the paragraph beginning at line 8 with the following rewritten paragraph:

At such time as aircraft 876, has closed to a distance sufficient to detect the second warning pulsed LED signal by a second set of second receivers ~~822~~ 823, the second controller ~~826~~ 827, initiates transmission of a second responsive pulsed LED light signal at the second wavelength to be received by another set of first receivers ~~818~~ 819.

On page 112, please replace the paragraph beginning at line 12 with the following

rewritten paragraph:

The alternate set of first receivers ~~818~~ 819, may then detect the second responsive pulsed LED light signal from the second controller ~~826~~ 827. The first controller ~~814~~ 815, continues to transmit at a regular reduced time interval the second warning pulsed LED light signal at a second wavelength. In addition, the first controller ~~814~~ 815, generates continued second acknowledgment pulsed LED light signal. The first controller ~~814~~ 815, may also emit a third warning pulsed LED light signal at a third modulated reduced duty cycle and third wavelength, as compared to the first and second sectors ~~810~~ 811 and wavelengths of the light support ~~800~~ 801.

On page 112, please replace the paragraph beginning at line 20 with the following rewritten paragraph:

At such time as the aircraft 876 has closed to a distance sufficient to detect the third warning pulsed LED light signal by ~~a third~~ another set of second receivers ~~822~~ 823, the second controller ~~826~~ 827, initiates the transmission of a third responsive pulsed LED light signal at the third wavelength.

On page 112, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The issuance of successive warnings and responsive pulsed LED light signals may occur until such time as a compliance signal is generated by the second controller ~~826~~ 827, indicating alteration of course of the aircraft 876. The first controller ~~814~~ 815, may simultaneously emit three or more warning pulsed LED light signals for detection by the aircraft 876. Further, the first controller ~~814~~ 815, may alter the visual warning light signal as integral to the rotating beacon 878, and/or strobe 880, for generation of a faster and/or more versatile observable warning light signal at such time as the controller initiates transmission of the second or third warning pulsed LED light signals.

On page 112, and continuing onto page 113, please replace the paragraph beginning at line 32 with the following rewritten paragraph:

The controller ~~814~~ 815, may also transmit by pulsed LED light signal continuous information such as the coordinates identifying the location of the obstacle 896. Further, the controller ~~814~~ 815, may transmit by pulsed LED light signal atmospheric information and/or

aircraft navigation guidance information which may be useful to a pilot of an aircraft 876.

On page 113, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

Real-time transmission of information may occur between a second controller ~~826~~ 827, and a first controller ~~814~~ 815, by the exchange of pulsed LED light signals. The interrogation pulsed LED light signal generated by a second controller ~~826~~ 827, of the aircraft 876 may trigger a transmission of a pulsed LED light signals from the first controller ~~814~~ 815, as to current air traffic proximate to a tower 894, wind direction, wind speed, visibility, ceiling, and/or weather conditions or other information which may be useful to a pilot. Real-time information received from the second controller ~~826~~ 827, may be processed for visual display on a screen integral to a cockpit. (FIG. 84.) Alternatively, real-time information received by the second controller ~~826~~ 827, may be processed for generation of voice information and instructions by transmission through a speaker integral to a cockpit or through headphones.

On page 113, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

An aircraft 876, obstacle 896, and/or tower 894, may include more than one LED light support ~~800~~ 801, for simultaneous generation of one or more warning light signals or SIT-TEL signals. Each light support ~~800~~ 801, may be connected to an independent first controller ~~814~~ 815, for generation of independent pulsed LED light signals. A pilot may select a particular wavelength of pulsed LED light signals for receipt of a particular type of information. For example, a first wavelength may include warning information as to the coordinates or location of an obstacle 896. A second wavelength may provide air traffic control information. A third wavelength may provide information as to weather and a fourth wavelength may provide navigation guides. A pilot may therefore receive different types of information from more than one light source ~~800~~ 801, and first controller ~~814~~ 815, as integral to a tower 894, and/or obstacle 896.

On page 113, and continuing onto page 114, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

The systematic information transfer through encrypted/pulsed light (SIT-TEL) systems may also be used to transmit approach and/or position information to an aircraft 876. An

acknowledgment protocol as earlier described may be used between an aircraft 876 and/or tower 894 to facilitate landing. The SIT-TEL system may communicate a visual reference descent point identifying a ~~point~~ position at which the aircraft 876, may or may not leave the constraints of the published approach vector for an airport. The SIT-TEL system may also communicate a wave-off or abort point based upon tracking of approach vectors for aircraft 876 which are beyond acceptable parameters. In both these situations, a SIT-TEL signal may be instantaneously generated by a first support ~~800~~ 801, and first LED light sources ~~802~~ 803, integral to a tower 894, for receipt by second ~~receptors~~ receivers ~~822~~ 823, and second controller ~~826~~ 827, integral to the aircraft 876. The generated SIT-TEL signal will cause the second controller ~~826~~ 827, to issue an audible, visual, and/or oral alarm or warning to a pilot during landing approach activities. An acknowledgment protocol may then be transmitted by the second LED illumination sources ~~828~~ 829, for receipt by the first ~~receptors~~ receivers ~~818~~ 819, integral to the tower 894. The SIT-TEL system used in association with approach landing activities for an aircraft 876, are supplemental to the communication systems of VHF, UHF, and TCAS proximity warning. Real-time flight information may also be exchanged between the aircraft 876, and the tower 894, related to the aircraft identity, flight plan, altitude, direction, rate of descent, and wind direction, wind speed, ceiling, instrument approaches, visibility, traffic conditions, landing clearance, as well as other types of aircraft landing information.

On page 114, please replace the paragraph beginning at line 19 with the following rewritten paragraph:

A plurality of taxi lights 898, may be positioned adjacent to an airport and runway 906. The taxi lights 898 are generally blue in color and are normally attached to a post support. Proximate to each taxi light 898, is located a marker 910 which identifies the location of a particular taxi light 898 for reference by a pilot during taxiing and/or radio communications with a control tower 894. The taxi lights 898, as known assist in identification of the position of an aircraft 876, on the ground and function as a reference for aircraft 876, taxiing to a gate for docking or from a gate in anticipation of departure and/or takeoff.

On page 114, and continuing onto page 115, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

The SIT-TEL system used in conjunction with taxi lights 898, involves the

transmission of a pulsed light signal from a beacon 878, attached to the top and/or bottom of the fuselage of an aircraft 876. Alternatively, the wing lights 908, for an aircraft 876, may be adapted to include a support ~~800~~ 801, having a plurality of first LED light sources ~~802~~ 803, for the SIT-TEL signaling system. The wing lights 908, and/or beacon 878, continuously operate to provide constant and/or flashing or rotational illumination relative to an aircraft 876.

On page 115, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

The SIT-TEL system as utilized in association with a plurality of taxi lights 898, generally places a second LED light support ~~800~~ 801, having the second LED light sources ~~828~~ 829, and second receivers ~~822~~ 823, integral to a ~~post~~ marker 910, where each ~~post~~ marker 910 is positioned proximate to and is regularly spaced along an airport taxi way. Each taxi light 898, may be powered by a hardwired electrical source and/or connected to a battery which may be rechargeable. Each taxi light 898, second illumination source ~~828~~ 829, and/or second receiver ~~822~~ 823, is also electrically connected to a second controller ~~826~~ 827, which may be separated from the taxi lights 898, at a central location. A second converter ~~824~~ 825, may be coupled to the second controller ~~826~~ 827, for conversion of electrical signals from the second receiver ~~822~~ 823, to digital signals, for processing within the second controller ~~826~~ 827. The second controller ~~826~~ 827, is constructed to pass information to a control center and/or control tower 894, by optical pulsed light within the SIT-TEL system or via wire connections. More than one controller ~~826~~ 827, may be in communication with a single and/or group of taxi lights 898.

On page 115, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

The taxi lights 898, as a portion of the SIT-TEL system may be organized into patterns and/or groups. Each collection, pattern, and/or group of taxi lights 898, may be in electrical communication with one or more second controllers ~~826~~ 827. Further, a second controller ~~826~~ 827, may be in communication directly with a control tower 894, or an additional main controller to facilitate transfer of information through transmission of free space pulsed LED light signals. The SIT-TEL signaling system utilized in association with a plurality of taxi lights 898, is designed to facilitate the tracking of aircraft 876, on the ground as on or adjacent to a runway 906, and/or airport. Tracking is accomplished through the transmission of a pulsed

light signal from the beacon 878, and/or aircraft lighting system. Alternatively, the SIT-TEL signaling system may be transmitted through the wing lights 908, taxi or recognition lights of the aircraft. The beacons 878, and/or wing lights 908, continuously emit a visual signal to identify the aircraft 876 where relative positioning of the aircraft may be determined.

On page 115, and continuing onto page 116, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

A first controller ~~814~~ 815, may generate through SIT-TEL signals identification information and/or call signs for an aircraft 876. This pulsed LED light signal may be detected by a second receiver ~~822~~ 823integral to one or more of the taxi lights 898. Each taxi light 898 forwards the received pulsed LED light signal to a second controller ~~826~~ 827 for relay of information related to the existence of an aircraft 876, and the aircraft 876 call sign or identification to a main controller or tower 894. Each taxi light 898, also transmits to the control tower 894, a pulsed LED light signal which identifies, the location of the individual taxi light. The location of the aircraft 876, relative to the taxi way may therefore be established. Alternatively, the taxi lights 898, may be electrically connected to a second controller ~~826~~ 827, and the second controller ~~826~~ 827, may be electrically connected to the tower 894, through the use of cable and/or wires for transmission of information therebetween.

On page 116, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

A recognition protocol may be utilized for the transmission of encrypted pulsed LED light signal messages to insure the security and verification as to the accuracy of communications between an aircraft 876, ~~and between aircraft 876~~ and a tower 894. Further, the existence of a recognition protocol assists to filter out background or other light noise signals.

On page 116, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

A tower 894, may contact a second controller ~~826~~ 827, for activation of a selected taxi light 898, to transfer a desired pre-stored and/or real-time SIT-TEL pulsed light signal from second illumination sources ~~828~~ 829, for transmission to the first ~~receptors~~ receivers ~~818~~ 819, integral to the aircraft 876. Traffic regulation signals such as delay gate departure, remain in a stationary position relative to the taxi way, or proceed to the end of the runway may occur

without the need for radio frequency transmissions. The SIT-TEL system as incorporated into taxi lights 898, and/or interfaced to an aircraft 876, improves the safety of ground travel of aircraft 876, aircraft personnel, and travelers by identifying in real-time the exact location of an aircraft 876, relative to a taxi way and/or runway 906.

On page 116, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

The taxi lights 898, may include one or a plurality of second illumination sources ~~828~~ 829, having different wavelengths of emitted light. A taxi light 898, may therefore simultaneously generate one or more of a plurality of SIT-TEL signals for receipt by a tower 894, and/or an aircraft 876. In addition, the taxi lights 898, may include one or a plurality of second receivers ~~822~~ 823, to recognize, detect, and/or receive different wavelengths of transmitted SIT-TEL signals.

On page 117, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

The systematic information transfer through encrypted/pulsed light (SIT-TEL) system may also be included as an integral component of a runway ~~900~~ 906, lighting system. The runway lighting system ~~900,~~ includes the same LED transmission and receptor components as earlier described in association with the taxi lights 898, and/or aircraft 876. The runway lights 900, and lighting system also includes one or more second controllers ~~826~~ 827, which are in communication with individual runway lights 900, a tower 894, and/or an aircraft 876.

On page 117, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

The runway lights 900, through the use of SIT-TEL transmissions indicate the presence and location of an aircraft 876, ~~related~~ relative to a runway 906. The runway lights 900, may transmit SIT-TEL signals to an aircraft 876, to advise of departure clearance and/or holding status in real-time. The aircraft 876, includes first ~~receptors~~ receivers ~~818~~ 819, and first controller ~~814~~ 815, for receipt of transmitted real-time SIT-TEL signals and for acknowledgment of receipt of SIT-TEL instructions. The controller ~~814~~ 815, is in communication with a screen

display, audio alarm, visual lights, and/or voice generation software and equipment within a cockpit as earlier described.

On page 117, please delete the paragraph beginning at line 22 as follows:

~~The runway lights 900, function as a supplemental and/or a backup communication system to verify instructions to aircraft 876, from a tower 894. The SIT-TEL system utilized in conjunction with runway lights 900, verifies and potentially reduces radio frequency traffic within an airport. The runway lights 900, communicating with either the tower 894, and/or an aircraft 876, may use a recognition protocol. A safeguard is then established to eliminate noise signals and to verify instructions of transmitted information to or from a control tower 894.~~

On page 117, and continuing onto page 118, please replace the paragraph beginning at line 29 with the following rewritten paragraph:

The runway lights 900, may emit a desired color or type of light signal. For example, in an aircraft hold situation, the second controller ~~826~~ 827, may flash a portion of the runway lights 900, in a different color such as red to communicate that takeoff clearance has been delayed. The runway lights 900, and particularly the second receiver ~~822~~ 823, and second controller ~~826~~ 827, may receive this instructions through the use of a SIT-TEL signal generated by the LED illumination sources of a tower 894.

On page 118, please replace the paragraph beginning at line 3 with the following rewritten paragraph:

The second controller ~~826~~ 827, coupled to the runway lights 900, may initiate the transmission of preprogrammed SIT-TEL messages to either the tower 894, or to a an aircraft 876, according to a preprogrammed cycle. For example, a runway light 900, may alternatively transmit through an SIT-TEL communication the position of an aircraft 876, and aircraft identification, where the next SIT-TEL signal transmitted is a repeat of the instructions received from the tower 894, to delay departure along a runway 906. Any number and/or combinations of real-time and/or preprogrammed communication messages may be transferred between an aircraft 876, runway light 900, and control tower 894. A pilot may also transmit preprogrammed information to either the runway lights receiver ~~900~~, and/or the tower 894, through the first LED

illumination sources ~~802~~ 803, and first controller ~~814~~ 815.

On page 118, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

The SIT-TEL communication system may be incorporated into runway approach lights 902. Initially, the illumination sources for the runway approach lights 902, will be required to upgrade and replace traditional illumination elements with LED technology. The upgraded approach lights 902, will include a light support ~~800~~ 801, second LED illumination sources ~~828~~ 829, second receivers ~~822~~ 823, and second controller ~~826~~ 827. The first controller ~~814~~ 815, first LED illumination sources ~~802~~ 803, and first receivers ~~818~~ 819, are integral to an aircraft 876. The features and functions as earlier described related to the taxi lights 898, and/or runway lights 900, are equally applicable to the runway approach lights 902.

On page 118, please replace the paragraph beginning at line 23 with the following rewritten paragraph:

The runway approach lights 902, provide illumination as visual strobe lights indicating a correct approach for a runway 906. A second controller ~~826~~ 827, may therefore regulate a portion of the LED light support ~~800~~ 801, to emit a visual strobe signal while another part of the LED support ~~800~~ 801, may be utilized for SIT-TEL communications with either a descending aircraft 876, and/or a tower 894. The runway approach lights 902, may ~~functions~~ function as a transmission source for the intermediate relay of real-time information and/or instructions to a descending aircraft 876, proceeding on an approach vector for landing on a runway 906.

On page 118, and continuing onto page 119, please replace the paragraph beginning at line 31 with the following rewritten paragraph:

The tower 894, may track an approach vector for an aircraft 876, through radar/VFR air traffic control systems. As a backup to the radio frequency communications, duplicate instructions may be transmitted by the approach lights 902, for receipt by the first receivers ~~818~~ 819, integral to the aircraft 876. Simultaneously, an airplane 876, may transmit SIT-TEL pulsed signals identifying the call sign or identification for the airplane 876, and information related to vector, rate of descent, speed, and altitude in real-time for transfer by the approach lights 902, to the control tower 894. A computer/processor may receive data

communicated by the SIT-TEL LED pulsed light system for verification of acceptable approach parameters. Analysis of the aircraft approach may result in the transmission through radio frequency and SIT-TEL signals of an abort approach message due to the existence of unacceptable approach parameters. Alternatively, a tower 894, may transmit through the approach lights 902, by issuance of radio frequency and/or SIT-TEL communications, a warning that approach parameters for an aircraft 876 are required to be modified for a successful landing. The approach lights 902, may alternatively continuously transmit through emission of SIT-TEL communications information such as wind direction, wind velocity conditions, weather information, runway status, ceiling information, and/or other information as appropriate to facilitate landing of the aircraft 876. Alternatively, the approach lights 902, may transmit through emission of SIT-TEL signals a backup transmission to an aircraft 876, advising of an emergency situation to break-off an approach for a runway 906.

On page 119, and continuing onto page 120, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The approach lights 902, as regulated by the second controller ~~826~~ 827, may also alter a pattern of strobe or other illumination for an approach to a runway 906. The alteration of a pattern of illumination for the approach lights 902, and/or the color of the transmitted light, may function as an additional visual warning to an aircraft 876, positioned upon or approaching a runway 906. The alteration of a standard white strobe approach signal to a light signal of a different color or wavelength, and the change of the stroboscopic or interval may immediately advise a pilot of a warning prior to receipt of a radio frequency transmission. The transfer of a distinct visual warning in conjunction with transmission of a SIT-TEL pulsed light warning signal may communicate warning information to a pilot at an improved rate of communication transfer as compared to radio frequency transmissions.

On page 120, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

The SIT-TEL communication system may be incorporated into airport support vehicle lights 904. The traditional illumination sources of a rotating beacon 878, are required to be replaced and upgraded with LED technology upon a support vehicle ~~904~~ 912. The airport support vehicle lights 904, include a light support ~~800~~ 801, a plurality of second LED

illumination sources ~~828~~ 829, at least one second receiver ~~822~~ 823, and at least one second controller ~~826~~ 827. The features and functions as earlier described related to the taxi lights 898, runway lights 900, and approach lights 902, are equally applicable to the airport support vehicle lights 904.

On page 120, please replace the paragraph beginning at line 14 with the following rewritten paragraph:

The airport support vehicle lights 904, provide illumination as a mechanically or simulated rotating beacon 878, indicating the location of the airport support vehicle 912 relative to an aircraft 876, and gate of an airport. The second controller ~~826~~ 827, functions to illuminate second LED illumination sources ~~828~~ 829, to emit a visual light signal observable by an aircraft 876. The second controller ~~826~~ 827, also functions to illuminate second LED illumination sources ~~828~~ 829, to emit a SIT-TEL communication to either a first receiver ~~818~~ 819, integral to an aircraft 876, or to a tower 894, to indicate and track the position of the airport service vehicle 912, relative to an aircraft 876, and airport. The airport service vehicle light 904, may function as a real-time position indicator and to communicate through SIT-TEL signals information as to the status of the performance of specific duties. For example, the SIT-TEL communication system through the second LED light sources ~~828~~ 829, as integral to a fuel truck may advise the first receivers ~~818~~ 819, integral to an aircraft 876 of the location of the airport service vehicle 912, and refueling status.

On page 121, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

The SIT-TEL communications related to the airport service vehicle light 904, may be continuously emitted or intermittently activated. The second controller ~~826~~ 827, includes preprogrammed signals such as continuous vehicle identification, and various status identifiers which may be selected or changed by an aircraft service personnel during the performance of duties.

On page 121, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

The SIT-TEL communications from the second LED illumination sources ~~828~~

829, integral to an airport service vehicle light 904, may transmit messages simultaneously or individually on one or more wavelengths for detection by first receivers ~~818~~ 819, integral to an aircraft 876, and/or second receivers ~~822~~ 823, integral to a tower 894. The second LED illumination sources ~~828~~ 829, are comprised of LED lights of more than one wavelength which may be grouped into one or more collections and/or sectors ~~810~~ 811 as earlier described.

On page 121, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

The second controller ~~826~~ 827, may also regulate the provision of different wavelengths of visual and/or SIT-TEL light signals simultaneously and/or independently. For example, an airport service vehicle light 904, may simultaneously emit a desired type of visual signal, a first wavelength SIT-TEL signal to a first receiver ~~818~~ 819, integral to an aircraft 876, and a second wavelength SIT-TEL signal to a second receiver ~~822~~ 823, integral to a tower 894. The second controller ~~826~~ 827, may also regulate the generation of an emergency visual signal and simultaneously emit an emergency SIT-TEL warning communication to an aircraft 876, and/or tower 894.

On page 121, please replace the paragraph beginning at line 21 with the following rewritten paragraph:

The airport service vehicle light 904, and LED light support ~~800~~ 801, may be attached to the top of a post ~~910~~. Alternatively, the airport service vehicle light 904, may be attached at location relative to an airport service vehicle 912. Generally, the most common wavelengths of color for the airport service vehicle lights 904, is either amber, green, and/or red.

On page 121, and continuing onto page 122, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

The second controller ~~826~~ 827, positioned integral with an airport service vehicle 912, may include preprogrammed locations relative to an airport. An individual may therefore select an appropriate location via an entry pad or keyboard to alter the pulsed SIT-TEL signal to reflect a change in position of the airport service vehicle 912. Alternatively, a plurality of positional receivers ~~914,~~ may be disposed at various locations about an airport. Each of the positional receivers ~~914,~~ may be constructed for transmission of a preprogrammed location

identification signal to a tower 894, through SIT-TEL signals and/or connected to the tower 894, by wire or cable connections. In this embodiment, the airport service vehicle light 904, continuously emits an identification signal which is detected by at least one adjacent positional receiver ~~914~~. Upon receipt of the SIT-TEL signal from the airport service vehicle light 904, a pulsated light position indicator signal is generated to either an aircraft 876, and/or tower 894, by the positional receiver ~~914~~. The second LED illumination sources ~~828~~ 829, as coupled to the positional receivers ~~914,~~ may simultaneously communicate a pulsed SIT-TEL signal representative of the location of the positional receivers ~~914,~~ as well as the identification of the type of signal received from the airport service vehicle light 904.

On page 122, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

Each second controller ~~826~~ 827, as integral to an airport service vehicle light 904, may include a pre-programmed coded pulsed signal identifying the particular type and/or function for an airport service vehicle 912. For example, a baggage transport may have a different pre-programmed pulse signal as compared to a fuel truck, a food service vehicle, and/or an aircraft maintenance vehicle. Alternatively, the type of aircraft service vehicle 912, may be indicated through the SIT-TEL signals of different and independent wavelengths.

On page 122, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

The use of a SIT-TEL communication system in association with a second controller ~~826~~ 827, of an airport service vehicle light 904, permits communication to a first receiver ~~818~~ 819, and first controller ~~814~~ 815, within a cockpit for an aircraft 876, to indicate the real-time status of food replacement, fuel delivery, baggage loading or unloading, and/or maintenance completion. A pilot may therefore advise the crew and/or passengers as to the status of a craft to assist in departure. In addition, a SIT-TEL system in association with the first controller ~~814~~ 815, and first LED illumination sources ~~802~~ 803, integral to a beacon 878, and/or wing lights 908, may expedite communication that an aircraft 876, is ready and available to receive food, fuel, and/or baggage loading and unloading which in turn enables faster preparation for continued aircraft service. The use of the SIT-TEL system with respect to an aircraft 876, and/or airport support vehicle 912, reduces the necessity for use of radio frequency transmissions

proximate to an airport by substitution with free space pulsed LED transmission and detection signals.

On page 123, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

In general, an LED light support ~~800~~ 801, having first LED illumination sources ~~802~~ 803, will be placed at a suitable location aboard a first vessel 916. (FIG. 73.) The LED light support ~~800~~ 801, may include a rotational device ~~804~~ 805, culminator assembly ~~806~~ 807, stationary and/or rotatable reflectors ~~808~~ 809, and/or sectors ~~810~~ 811, and/or different wavelengths of LED light sources as earlier described. The LED light support ~~800~~ 801, is coupled to a vessel power supply and/or may be battery operated having rechargeable solar cells as earlier described or wave-action generators.

On page 123, please replace the paragraph beginning at line 8 with the following rewritten paragraph:

A second LED light support ~~800~~ 801, having second LED illumination sources ~~828~~ 829, second receiver ~~822~~ 823, second converter ~~824~~ 825, and second controller ~~826~~ 827, may be integral to a marine buoy 918, lighthouse 920, and/or ~~second~~ other vessel ~~922~~. The second receivers ~~822~~ 823, second controller ~~826~~ 827, and/or second LED illumination sources ~~828~~ 829, are constructed and arranged for receipt of SIT-TEL LED pulsed light communication signals as transmitted from the first vessel 916, for communication recognition, verification, and responsive communication as earlier described with respect to the motor vehicles, aircraft, taxi lights, approach lights, and/or runway lights.

On page 123, please replace the paragraph beginning at line 16 with the following rewritten paragraph:

The use of the SIT-TEL system in association with a buoy 918, preferably enables enhanced visualization of the location of the buoy 918, while simultaneously transmitting an SIT-TEL LED pulsed light signal which may indicate pre-programmed and/or real-time information for transmission to the vessel 916. The second controller ~~826~~ 827, as integral to the marine buoy 918, may transmit pre-stored information such as the identification number of the buoy, the fact that the buoy may be an east channel marker and the depth of the water at the location of buoy 918. In addition, the second receivers ~~822~~ 823, may be disposed about the buoy 918, at various

locations where an individual second receiver ~~822~~ 823, will only detect a transmitted SIT-TEL signal at such times as a first vessel 916, is outside of a marked channel. In this instance the selected second receiver ~~822~~ 823, will generate a signal to the second controller ~~826~~ 827, which will in turn generate a responsive warning signal to the first vessel 916, for receipt by the first receivers ~~818~~ 819, that the first vessel 916, is outside of the marked main channel and may be on a course for running aground and/or striking underwater obstacles.

On page 123, and continuing onto page 124, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

The second receivers ~~822~~ 823, as integral to the buoys 918, may also be adapted to receive SIT-TEL signals transmitted from the first vessel 916, via the first LED illumination sources ~~812~~ 803, and first controller ~~814~~ 815, for communication of information such as the registered name and port for the first vessel 916. The buoy 918, may then forward the identity of the first vessel 916, to a second buoy 918, and/or a harbor control center through the use of additional SIT-TEL LED pulsed illumination signals. Any number of buoys 918, may be utilized to sequentially transmit SIT-TEL pulsed LED illumination signals to a harbor master related to communications from a first vessel 916.

On page 124, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The first controller ~~814~~ 815, as integral to the first vessel 916, and the second controller ~~826~~ 827, as integral to the buoy 918, may also include a pre-stored and/or pre-programmed recognition protocol related to pulsed LED SIT-TEL light signals for initiation of communication therebetween.

On page 124, please replace the paragraph beginning at line 11 with the following rewritten paragraph:

The second LED illumination sources ~~828~~ 829, as integral to the buoy 918, are constructed and arranged to provide a visual LED signal within the red and/or green spectrums which may be used for navigation purposes. The visual LED signals as transmitted by the second illumination sources ~~828~~ 829, may be flashing, pulsed, modulated, and/or may simulate the appearance of rotation as earlier described. Alternatively, the LED light support ~~800~~ 801, as integral to the buoy 918, may be physically rotated via a rotational device ~~804~~ 805, as earlier

described.

On page 124, and continuing onto page 125, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

The buoy 918, may be positioned at any location within a body of water to continuously transmit a pulsed LED SIT-TEL signal for communication of information such as longitude and latitude coordinates. Alternatively, the buoy 918, may become activated and transmit SIT-TEL signals at such time as the second receiver ~~822~~ 823, receives a triggering signal from a first set of LED illumination sources ~~802~~ 803, integral to a first vessel 916. Each buoy 918, may also transmit real-time information such as water temperature, barometric pressure, changes in barometric pressure, temperature, and/or wind speed and direction. The buoy 918, may include a long life lithium battery and/or a backup rechargeable solar cell as earlier described.

On page 125, please replace the paragraph beginning at line 2 with the following rewritten paragraph:

Buoy's 918, may also be utilized to record marine traffic for tracking purposes. For example, a first vessel 916, may transmit the vessel identity to a buoy 918, through the use of SIT-TEL communication signals. The buoy 918 may then record the date, time of transmission, and/or destination information related to the vessel 916. The SIT-TEL signal as received by the second receiver ~~822~~ 823, is preferably recorded on the second controller ~~826~~ 827. In the event that a first vessel 916, becomes overdue then a retrieval craft such as an airplane or helicopter may be dispatched by a Coast Guard unit having interrogation SIT-TEL capabilities. A Coast Guard vessel or aircraft may then fly within range of a buoy 918, and transmit an SIT-TEL interrogation signal which will trigger the second controller ~~826~~ 827, to dump all pre-stored marine traffic data for transmission to the Coast Guard aircraft or vessel via a responsive SIT-TEL signal. A Coast Guard and/or searching vessel may thereby identify time and direction of travel for a lost vessel to narrow a search area thereby improving the probability of survivor retrieval. In addition, a vehicle such as an aircraft 876, may fly within the proximity of a buoy 918, for transmission of a first SIT-TEL signal to be received by the second receiver ~~822~~ 823, and/or second controller ~~826~~ 827, to modify future SIT-TEL communications to be generated by the second LED illumination sources ~~828~~ 829. In this regard, warning signals may be activated

and/or altered on the marine buoy 918. A marine vessel 916 which has previously been outside of radio frequency transmission range may therefore receive updated SIT-TEL communication signals from a buoy 918, related to warnings such as adverse weather and/or wave conditions.

On page 125, and continuing onto page 126, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

SIT-TEL communication signals may also be transmitted between a first vessel 916, and a lighthouse 920, in a manner similar to the SIT-TEL communications identified between an aircraft 876, and tower 894, as earlier described. SIT-TEL communications being generated by a lighthouse 920, are anticipated to be prominently pre-recorded and/or pre-stored communication signals as integral to the second controller ~~826~~ 827. It is anticipated that the SIT-TEL communication signals as generated by a lighthouse 920, will transmit information such as longitude and/or latitude or other coordinates, and navigation information which will assist a first vessel 916, from approaching a marine hazard.

On page 126, please replace the paragraph beginning at line 3 with the following rewritten paragraph:

The components, features, and applications as earlier described related to the SIT-TEL LED pulsed light communication system are equally applicable for use in a subway, bus, and/or mass transit application. (FIGS. 74 and 77.) For convenience, the subway, bus, and/or mass transit vehicle will be identified by the numeral 924. The subway/bus 924, preferably includes the elements as earlier identified and described related to the LED light support ~~800~~ 801, first LED illumination sources ~~802~~ 803, culminator assembly ~~806~~ 807, sectors ~~810~~ 811, power source ~~812~~ 813, first controller ~~814~~ 815, first receiver ~~818~~ 819, and converter ~~820~~ 821.

On page 126, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

A second receiver ~~822~~ 823, second converter ~~824~~ 825, second controller ~~826~~ 827, and second LED illumination sources ~~828~~ 829, are preferably constructed and arranged for attachment to a street sign and/or traffic light 926.

On page 126, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

In the mass transit application, the first controller ~~814~~ 815, as integral to the bus

and/or subway 924, includes pre-stored information as to the vehicle identification number, schedule, and vehicle route. The second controller ~~826~~ 827, as integral to the street sign and/or traffic light 926, includes pre-stored identification information such as a position location relative to a map. Within the subway mass transit application position identifiers 928, may be regularly spaced along a route in substitution for the street sign/traffic lights 926.

On page 126, and continuing onto page 127, please replace the paragraph beginning at line 20 with the following rewritten paragraph:

Initially, the first controller ~~814~~ 815, will signal initiation of a first SIT-TEL pulsed light communication signal to be transmitted for detection by the second receivers ~~822~~ 823, as integral to a street sign 926, and/or position identifier 928. The second controller ~~826~~ 827, as coupled to the street sign 926, or position identifier 928, will process the received signal for generation of a second SIT-TEL LED pulsed light signal for transfer to a centrally located third receiver 930, as connected to a third converter 932, third controller 934, and third LED illumination device 936. The third receiver 930, third controller 934, and/or third LED illumination device 936, are preferably elevated with respect to the street signs 926, and/or position identifiers 928, in order to receive pulsed LED SIT-TEL light signals from a plurality of street signs 926, and/or position identifiers 928. The third controller 934, may be electrically coupled to a traffic processor 938, which functions as a central processing and tracking location related to SIT-TEL signals received from the third controller 934. The second controller ~~826~~ 827, as integral to the street sign 926, and/or position identifier 928, may record the first SIT-TEL signal received from the first controller ~~814~~ 815. The second controller ~~826~~ 827, may then relay the first SIT-TEL signal including vehicle identification along with additional information such as an identification signal corresponding to a street sign 926, and/or position identifier 928, address and a signal corresponding to the time of transmission of the SIT-TEL signal. The third controller 934, as receiving the first and second SIT-TEL signals may transfer information to the traffic processor 938, which may compare the information to a preset map and/or schedule for transmission of SIT-TEL signals back to the street signs 926, and/or position identifiers 928. The street signs 926, and position identifiers 928, as receiving a SIT-TEL signal from the traffic processor 938, may initiate the transmission of an additional SIT-TEL signal for receipt by a plurality of displays 940, as representative of the tracking and/or location of a bus/subway 924

proceeding along a preselected route. Potential passengers waiting for a bus/subway 924, may therefore track in real-time the location of the bus/subway 924. The tracking of a subway/bus 924, is thereby facilitated. Additionally, bus stop and/or subway connection information may also be transmitted by SIT-TEL pulsed LED light signals for receipt upon the displays 940, to assist passengers during travel activities.

On page 127, please replace the paragraph beginning at line 18 with the following rewritten paragraph:

Each subway/bus 924, may also include a display 940, which is adapted to receive a second SIT-TEL pulsed light signal as generated by a street sign 926, and/or position identifier 928, for processing by a first controller ~~814~~ 815. The position location identifiers from the street signs/traffic light 926, and/or position identifier 928, may assist passengers to identify the real-time location of the vehicle with respect to a pre-selected route to facilitate departure locations.

On page 127, and continuing onto page 128, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The wavelengths selected for the first LED illumination sources ~~802~~ 803, second LED illumination sources ~~828~~ 829, and/or third LED illumination devices 936, may be identical and/or different to facilitate communication of SIT-TEL systems. The first receiver ~~818~~ 819, second receiver ~~822~~ 823, and/or third receivers 930, may be adapted to receive a particular wavelength of generated LED pulsed light signal. Alternatively, each of the first controllers ~~814~~ 815, second controllers ~~826~~ 827, and/or third controllers 934, may be coupled to a scanner ~~830~~ 831, which searches to identify transmitted SIT-TEL signals used to communicate tracking and/or other information within a mass transit application. The use of SIT-TEL communication signals in association with mass transit tracking applications avoids the necessity for utilization of radio frequency transmissions which may frequently encounter interference from buildings or other sources within an urban environment and facilitates real-time planning for the customers, generating confidence in the system.

On page 128, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

A plurality of third controllers 934, may be disposed in any desired pattern as elevated with respect to an urban environment for communication relay to assist in the tracking,

regulation, and control of a mass transit SIT-TEL application. The third receivers 930, third converters 932, third controllers 934, and third LED illumination devices 936, are coupled to a power source which may be a battery integral to the street sign/traffic light 926, and/or position identifiers 928. The power source may be hardwired into a power source for a city. The first LED support ~~800~~ 801, as integral to the bus/subway 924, may be positioned at any location including but not necessarily limited to the front dashboard proximate to a window, to the exterior proximate to the top of the vehicle, and/or front of the bus/subway. In addition, the second receiver ~~822~~ 823, may be positioned at any location relative to a street sign/traffic light 926, and may be located toward the top with respect thereto.

On page 128, please replace the paragraph beginning at line 20 with the following rewritten paragraph:

The OPTICOM intersection clearing device is generally referred herein as the OPTICOM device identified by the numeral 942. (FIG. 67.) The OPTICOM device 942, includes a second receiver ~~822~~ 823, second converter ~~824~~ 825, second controller ~~826~~ 827, and second LED illumination sources ~~828~~ 829. In addition, the OPTICOM device 942, includes an LED support ~~800~~ 801, having sectors ~~810~~ 811. The OPTICOM device 942, is electrically coupled to a main power supply for a traffic signal 926, and may be constructed to have a backup power supply such as a battery which may be rechargeable through the use of a solar cell.

On page 128, and continuing onto page 129, please replace the paragraph beginning at line 27 with the following rewritten paragraph:

In general, the OPTICOM device 942, and second controller ~~826~~ 827, is connected to an override switch ~~944,~~ which is integral to the traffic light 926. A police, ambulance, fire, or other emergency vehicle during an emergency situation frequently requires the immediate transposition of a semaphore to a green traffic condition signal, to facilitate speed of arrival at an emergency situation. In addition, the first SIT-TEL system as integral to an emergency vehicle may also include a first ~~receptor~~ receiver ~~818~~ 819. During use of the OPTICOM device 942, an officer or emergency personnel will activate a switch to initiate the first controller ~~814~~ 815, to generate a first SIT-TEL communication signal for transmission from the first LED illumination sources ~~802~~ 803. The first SIT-TEL pulsed light signal will be received by the second receiver ~~822~~ 823, integral to the OPTICOM device 942. The second

controller ~~826~~ 827, of the OPTICOM device 942, will then trigger the override switch ~~944,~~ to instantaneously transition the semaphore from either a red or amber signal to a green light signal to permit passage of an emergency vehicle through an intersection.

On page 129, please replace the paragraph beginning at line 9 with the following rewritten paragraph:

The first LED illumination sources ~~802~~ 803, as integral to the emergency vehicle are pointed upwardly towards the top of the traffic light and/or semaphore 926. The ~~first receptor~~ second receiver 823 ~~818~~, is proximate to the top of the traffic light 926/semaphore. The second receiver ~~822~~ 823, second converter ~~824~~ 825, second controller ~~826~~ 827, and second LED illumination sources ~~828~~ 829, may be hardwired to an electrical power source and/or powered through a battery as earlier described.

On page 129, and continuing onto page 130, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

The second receiver ~~822~~ 823, as integral to the OPTICOM device 942, continuously receives the first SIT-TEL signal as generated from the first LED illumination sources ~~802~~ 803. At such time as the second receiver ~~822~~ 823, terminates detection of the SIT-TEL signal as generated by the first LED illumination sources ~~802~~ 803, a pre-programmed timing delay may be initiated for deactivation of the override switch ~~944,~~ to return the traffic light 926, and/or semaphore to a normal operational condition. Alternatively, the emergency vehicle may include an additional LED support ~~800~~ 801, of first LED illumination sources ~~802~~ 803, to transmit from the back of a vehicle once passage through an intersection has been completed. A second SIT-TEL pulsed LED light signal may thereby be generated by the first controller ~~814~~ 815, for detection by the second receiver ~~822~~ 823, as integral to the OPTICOM device 942, for deactivation of the override switch ~~944,~~ to return the semaphore/traffic light 926, to a standard operational condition. Alternatively, the second controller ~~826~~ 827, as integral to the OPTICOM device 942, may include internal pre-programmed software which continues to activate the override switch ~~944~~, for a pre-set period of time. In addition, the first controller ~~814~~ 815, and second controller ~~826~~ 827 as integral to the OPTICOM device 942, may be programmed to proceed with a recognition protocol as earlier described. The use of the SIT-TEL communication signaling system may be utilized as a backup or supplemental communication device to radar

transmitters, transponders, and/or radio frequency equipment. The OPTICOM device 942, provides a visual activation light signal as well as a responsive SIT-TEL communication signal for receipt by the ~~first receptors~~ second receivers 823 ~~818~~, and/or observation by an emergency personnel or policeman to indicate that, in fact, the override switch ~~944,~~ has been activated to change the semaphore/traffic light 926, to a green configuration to permit unobstructed passage of the emergency vehicle through an intersection.

On page 130, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The components, features, and applications as earlier described related to the SIT-TEL LED pulsed light communication system are equally applicable for use within a railroad crossing application. (FIGS. 75 and 76.) Generally, black and white railroad crossing signs having no alarm and/or gate are utilized in most all rural environments due to the reduced level of traffic and prohibitive cost for inclusion of more safety conscious railroad warning indicators. The absence of alarms and gates at rural railroad crossings increases the likelihood of motor vehicle accidents and fatalities. Counties generally desire to have safer railroad crossings and railroads also desire safer railroad crossings to reduce risk of motor vehicle accidents. A need therefore exists for an inexpensive, long life and dependable visual and audio signal at rural railroad crossings which is easily adaptable for inclusion within existing railroad crossing signs.

On page 130, please replace the paragraph beginning at line 18 with the following rewritten paragraph:

A railroad crossing warning signal 946, is generally formed of an LED support ~~800~~ 801, having first LED illumination sources ~~802~~ 803, formed into sectors ~~810~~ 811. In addition, the railroad crossing warning signal 946, includes a culminator assembly ~~806~~ 807, a power source ~~812~~ 813, a first controller ~~814~~ 815, a solar energy cell ~~816~~ 817, a first receiver ~~818~~ 819, and a converter ~~820~~ 821. The elements of the railroad crossing signal are directly attached to a railroad crossing sign pole as placed adjacent to rural railroad crossings.

On page 130, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The LED light support ~~800~~ 801, having the first LED illumination sources ~~802~~ 803, is adapted for receipt of power from the first controller ~~814~~ 815, to simulate the existence of

a revolving light. The power as regulated by the first controller ~~814~~ 815, may permit the illumination of individual and/or groups of LED'S. The railroad crossing warning signal may also include an audible alarm 948, which may be used to generate a buzzing, bell, and/or siren warning signal for detection by motor vehicles.

On page 130, and continuing onto page 131, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

A train 950, preferably includes a front 952, and a back 954. A second LED light support ~~800~~ 801, having second LED illumination devices ~~828~~ 829, is positioned proximate to the front 952 of the train 950. In addition, a third LED light support ~~800~~ 801, including a third receiver ~~930~~, third converter ~~932~~, third controller ~~934~~, and third LED illumination sources ~~936~~, may be positioned proximate to the back 954 of the train 950. The second controller ~~824~~ 827, and second LED illumination sources ~~828~~ 829, are constructed to continuously flash a visible warning light signal which may include a modulated duty cycle as earlier described. The second controller ~~826~~ 827, and second LED illumination sources ~~828~~ 829, are also constructed and arranged to continuously emit SIT-TEL communication signals as earlier described. The SIT-TEL communication signals as generated by the second controller 827 transmit a recognition protocol as earlier described and are adapted for detection by the first ~~receptors~~ ~~818~~ receivers 819, as integral to the railroad crossing sign 956. The first receiver ~~818~~ 819, is constructed to receive the first SIT-TEL signal as generated by the second controller ~~826~~ 827 integral to the front 952, of the train 950. The first controller ~~814~~ 815, interprets the first SIT-TEL communication signal for activation of the first LED illumination sources ~~802~~ 803, for the provision of a warning light signal and simultaneously the activation of the audible alarm 948. Power is applied to the audible alarm 948, railroad crossing warning signal 946, first controller ~~814~~ 815, first ~~receptors~~ ~~818~~ receivers 819, and first LED illumination sources ~~802~~ 803, through the use of a long life lithium battery and/or a rechargeable battery which may receive power from a solar power cell.

On page 131, please replace the paragraph beginning at line 18 with the following rewritten paragraph:

The first controller ~~814~~ 815, upon receipt of the initial SIT-TEL communication signal from the train 950, may initiate the transmission of a responsive SIT-TEL signal from the

first LED illumination sources ~~802~~ 803, for completion of the recognition protocol. The railroad crossing warning signal 946, includes first receivers ~~818~~ 819, positioned on opposite sides of the railroad crossing sign 956, along an axis parallel to the direction of the train 950. The first receivers ~~818~~ 819, are thereby constructed to receive SIT-TEL communication signals from only one direction which are on opposite sides of the railroad crossing sign 956.

On page 131, and continuing onto page 132, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

The rear, back, and/or caboose ~~954~~, of the train 950, includes a the third set of LED illumination devices ~~936,~~ for generation of a second SIT-TEL communication signal. Once a train 950, has passed a railroad crossing, the transmission of the second SIT-TEL communication signal may be detected by the opposite first receiver ~~818~~ 819, which deactivates the audible alarm 948, and/or the warning signal light as generated by the first controller ~~814~~ 815. Alternatively, the first controller ~~814~~ 815 may include a timer for deactivation of the visible warning light signal and audible alarm 948 following passage of a preselected period of time. The first SIT-TEL light signal and the second SIT-TEL light signal are formed of different patterns of pulsated light signals as generated by the second controller ~~826~~ 827, and/or third controller ~~934~~. Any wavelength of SIT-TEL signal may be selected for transmission from the first LED illumination sources ~~802~~ 803, second LED illumination sources ~~828~~ 829, and third LED illumination sources ~~936~~.

On page 132, please replace the paragraph beginning at line 6 with the following rewritten paragraph:

A motor vehicle may include a fourth receiver ~~958~~, fourth converter ~~960~~, a fourth controller ~~962~~, a fourth LED illumination device ~~964~~, and an override switch ~~944~~. The fourth receiver ~~958,~~ is adapted to additionally receive the first SIT-TEL train warning signal in a manner similar to the railroad crossing warning signal ~~946~~. The receipt of the initial SIT-TEL warning signal from the train 950, may be processed by the fourth controller ~~960~~ for activation of an override switch ~~944~~, which may be electrically coupled to the radio of the motor vehicle. In addition, the fourth controller ~~962~~, may be coupled to the fourth LED illumination device ~~964~~, positioned to the interior proximate to the dashboard of the motor vehicle. The receipt by the fourth receiver ~~958~~, of the first SIT-TEL warning signal as generated by the train 950, causes the

controller ~~962~~, to initiate a warning illumination from the fourth LED illumination sources ~~964~~, for observation by an individual as a visual warning signal as to the existence and proximity of a train. An individual may therefore receive a warning indication from a railroad crossing warning signal 946, as well as from the interior of an automobile pursuant to the illumination of the fourth LED illumination device ~~964~~, to heighten awareness as to the existence of a train 950. The fourth controller ~~962~~, following the receipt of the first SIT-TEL warning signal from the train 950, may, via the override switch ~~944~~, terminate power to a motor vehicle radio and/or generate a voice message through a speaker as earlier described.

On page 132, please replace the paragraph beginning at line 25 with the following rewritten paragraph:

The components, features, and applications as earlier described related to the SIT-TEL LED pulsed light communication system are equally applicable for use in an urban suburban communication system 966. (FIGS. 74 and 77.)

On page 132, and continuing onto page 133, please replace the paragraph beginning at line 28 with the following rewritten paragraph:

The urban suburban communication system 966, is generally formed of an LED light support ~~800~~ 801, having first LED illumination sources ~~802~~ 803, formed into sectors ~~810~~ 811. The urban suburban communication system 966, also includes a main power source ~~812~~ 813, as earlier described along with a battery backup power source ~~844,~~ which may be formed of a rechargeable solar cell ~~816~~ 817. The urban suburban communication system 966, further includes at least one first controller ~~814~~ 815, at least one first receiver ~~818~~ 819, and at least one first converter ~~820~~ 821. The urban suburban communication system 966, is positioned to the top of a central building 968, or tower 970, as related to a geographic area.

On page 133, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

The urban suburban communication system 966, is adapted to generate SIT-TEL pulsed LED light signals in a horizontal and downwardly direction related to the location of the building 968, and/or tower 970. The urban suburban communication system 966, may be formed of a circular, oval, octagonal, hexagonal, square, and/or rectangular shaped LED light support ~~800~~ 801. Sectors ~~810~~ 811 of culminators ~~806~~ 807, and/or first LED illumination sources ~~800~~

801, may be angularly offset for the emission of light at any desired angle of illumination. The first controller ~~814~~ 815, controls the emission of SIT-TEL communication signals from the first LED illumination sources ~~802~~ 803, in one or more desired directions sequentially, individually, and/or simultaneously. The first LED illumination sources ~~802~~ 803, are constructed and arranged to additionally provide a warning light signal such as a beacon for visual recognition by an aircraft 876.

On page 133, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

The urban suburban communication system 966, may also formed of a plurality of relay sites 972, which include at least one second receiver ~~822~~ 823, at least one second converter ~~824~~ 825, at least one second controller ~~826~~ 827, and at least one set of second LED illumination sources ~~828~~ 829. The relay sites 972, may be secured to street and/or traffic signals 926, and/or street lamps. Alternatively, the relay sites 972, may be placed at any desired location within an urban/suburban environment. Any number of relay sites 972, may be used for detection of initial SIT-TEL communication signals as emitted from the urban suburban communication system 966.

On page 133, and continuing onto page 134, please replace the paragraph beginning at line 23 with the following rewritten paragraph:

The relay sites 972, transmit and/or receive SIT-TEL communication signals to or from a user site ~~974,~~ which may be placed upon a dwelling, building, and/or other structure 976. The user sites ~~974,~~ include at least one third receiver 930, at least one third converter 932, at least one third controller 934, and at least one set of third LED illumination sources 936. The user site ~~974,~~ is electrically coupled to a visual display 940, audible alarm ~~948~~, and/or LED light support ~~800~~ 801, having LED illumination sources. Any number of relay sites 972, may be sequentially positioned between the urban suburban communication system 966, and the user site ~~974~~. Each SIT-TEL communication signal may therefore be passed from the first LED light sources ~~802~~ 803, to a second receiver ~~822~~ 823, integral to an initial relay site 972, for successive transmission to additional second receivers ~~822~~ 823, of relay sites 972, for final SIT-TEL transmission to a third receptor 930, integral to a user site ~~974~~. The third controller 934, may then process the final SIT-TEL signal at the dwelling, building, and/or structure 976, for issuance of a signal on the display 940, activation of an LED light on a light support ~~800~~ 801, and/or activation of an

audible alarm ~~948~~. SIT-TEL communication signals may therefore be processed sequentially from the urban suburban communication system 966, through successive relay sites 972, to a user site ~~974~~. Types of SIT-TEL signals may include but are not necessarily limited to mail messages, pictures, photographs, advertisements, communications, news, real-time entertainment, pre-programmed entertainment, civil defense warnings, and/or any other type or form of communication which may be reduce to pulsed and/or encrypted LED light signals. It is anticipated that SIT-TEL communication signals may be used as a supplement or replacement of modes of communication such as mail, e-mail, advertising, billboards, cell phones, telephones, radio, and/or television.

On page 134, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

Additionally, the user site ~~974,~~ includes the third controller 934, and the third LED illumination sources 936, which are constructed and arranged to emit responsive SIT-TEL communications signals upstream through the second ~~receptors~~ receivers ~~822~~ 823, of the relay sites 972, for further communication to the first receivers ~~818~~ 819, of the urban suburban communication system 966, for processing within the first controller ~~814~~ 815. The first controller ~~814~~ 815, may identify a designated recipient of the communication for generation of a responsive SIT-TEL signal downstream, back through a series of second receivers ~~822~~ 823, for ultimate transition to a particular third receiver 930, at the previously identified and designated user site ~~974~~.

On page 134, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

In this regard, each intermediate relay site 972, and user site ~~974~~, is required to have a stored identification combination of pulsed LED light signals to identify an address. The addresses for each and every site 972, and/or user site ~~974~~, are stored within each respective second controller ~~826~~ 827, and third controller 934, respectively. The first controller ~~814~~ 815, second controller ~~826~~ 827, and third controller 934, are computers having microprocessors and stored translation software to recognize and interpret received SIT-TEL communication signals for communication to individuals through the display 940, and/or audible alarms ~~948~~.

On page 134, and continuing onto page 135, please replace the paragraph

beginning at line 32 with the following rewritten paragraph:

The urban suburban communication system 966, relay sites 972, and/or user sites ~~974~~, may each include more than one LED light support ~~800~~ 801, and one or a plurality of first receivers ~~818~~ 819, second receivers ~~822~~ 823, and/or third receivers 930, respectively. The urban suburban communication system 966, relay sites 972, and/or user sites ~~974~~, may each include one or more first controllers ~~814~~ 815, second controllers ~~826~~ 827, and/or third controllers 934. Each of the first controllers ~~814~~ 815, second controllers ~~826~~ 827, and/or third controllers 934, may be constructed to process a selected type of SIT-TEL communication signal. For example, one set of first controllers ~~814~~ 815, second controllers ~~826~~ 827, and third controllers 934, may exclusively communicate SIT-TEL signals related to mail and/or e-mail. Another set of first controllers ~~814~~ 815, second controllers ~~826~~ 827, and/or third controllers 934, may exclusively communicate SIT-TEL signals related to cellular and/or telephone signals. Any number of sets of controllers may be utilized as a portion of the urban suburban communication system 966 to communicate a specific desired type of information.

On page 135, please replace the paragraph beginning at line 23 with the following rewritten paragraph:

Recognition protocols as earlier described are equally applicable as related to the SIT-TEL communications between the urban suburban communication system 966, relay sites 972, and/or user sites ~~974~~.

On page 135, and continuing onto page 136, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

A hardwired connection may be provided between the third receiver 930, or the user sites ~~974~~, and an internally located display 940, audible alarm ~~948~~, and/or LED light signal. The third controller 934, may permit a user to select a type of display 940, for communication of received SIT-TEL pulsed light signals. For example, an individual may manipulate the third controller 934, for generation of a processed and interpreted SIT-TEL communication signal for display upon a screen, television, stereo, speaker, alarm, and/or flashing or other warning light. Additionally, the SIT-TEL communications as processed by the third controller 934, may not be accessible to a end user without entry of security measures to facilitate retrieval such as the use of passwords and/or other encryption means.

On page 136, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

The urban suburban communication system 966, relay sites 972, and/or user sites ~~974~~, may each additionally include scanners ~~830~~ 831 and/or dials as earlier described for detection of transmitted SIT-TEL communication signals.

On page 136, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The third controller 934, is constructed and arranged to interpret digital pulses for translation into visual images for showing on the display 940. Additionally, the third controller 934, is constructed to issue an audible alarm ~~948~~, and/or a flashing LED light signal as a portion of a civil defense warning to advise occupants of the existence of severe weather conditions.

On page 136, please replace the paragraph beginning at line 12 with the following rewritten paragraph:

The third controller 934, and third LED illumination sources 936, as integral to a user site ~~974~~, may also be utilized to transmit encrypted SIT-TEL light signals and/or messages on an emergency basis as coupled to third receivers 930, integral to a police or fire station. An individual user within a building, dwelling, or structure 976, may therefore activate a switch causing the initiation of a LED pulsed SIT-TEL emergency signal for transmission to a police or fire station without the necessity of use of a telephone.

On page 136, and continuing onto page 137, please replace the paragraph beginning at line 26 with the following rewritten paragraph:

A vehicle to vehicle SIT-TEL communication application is ~~significantly~~ similar to ~~for~~ the earlier described applications related to motor vehicle license plates and aircraft/aviation SIT-TEL communications. In addition, to the SIT-TEL communications as previously identified, an emergency vehicle 978, may include an LED light support ~~800~~ 801, having first LED illumination sources ~~802~~ 803, formed into sectors ~~810~~ 811, as earlier described. In addition, the emergency vehicle 978, may include at least one first controller ~~814~~ 815, at least one first ~~receptor~~ receiver ~~818~~ 819, and at least one converter ~~820~~ 821, as coupled to the emergency vehicle electrical system and backup power source such as a battery ~~844~~. Emergency vehicle personnel such a police officer may manipulate the first controller ~~814~~ 815, to either

select a pre-programmed SIT-TEL signal or may generate a SIT-TEL signal for transmission from the first LED illumination sources ~~802~~ 803. At least one second receiver ~~822~~ 823, at least one second controller ~~824~~ 827, and at least one set of second LED illumination sources ~~828~~ 829, may be included within a street and/or a roadway sign ~~980~~. The transmitted SIT-TEL signal as received by the second receivers ~~822~~ 823, integral to the road sign ~~980~~, is preferably processed by the second controller ~~826~~ 827, for issuance of a message such as "congestion", "accident", "reduced speed", and/or any other message as appropriate for communication of traffic conditions. SIT-TEL communications may therefore be passed through free-space from an emergency vehicle 978, to alter roadway signs ~~980~~, without use of radio frequency transmissions.

On page 137, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

The first controllers ~~814~~ 815, of the emergency vehicle 978, and the second controller ~~826~~ 827, of the roadway signs ~~980~~, may perform recognition protocols to verify authenticity of transmitted instructions and/or messages. In addition, each of the first controllers ~~814~~ 815, of the emergency vehicle 978, and the second controllers ~~826~~ 827, of the roadway signs ~~980~~, include identification and recording software to assist in recording of transmitted SIT-TEL instructions.

On page 137, please replace the paragraph beginning at line 19 with the following rewritten paragraph:

An emergency vehicle 978, may also transmit a SIT-TEL communication signal to a street sign/lamp 926, a building, structure, and/or dwelling 976, a user site ~~974~~, or to a relay site 972, of a urban suburban communication system 966, to track the location of the emergency vehicle 978, and/or to communicate messages and instructions through the use of SIT-TEL pulsed LED communication signals. An emergency vehicle 978, may emit pre-stored and/or real-time free-space communication signals to another motor vehicle, aircraft 876, road sign ~~980~~, OPTICOM 942, urban suburban communication system 966, railroad crossing warning sign 946, and/or any other application as identified herein. Real-time communications may be issued through a keyboard, key pad, and/or voice recognition software integral to the emergency vehicle 978.

On page 137, and continuing onto page 138, please replace the paragraph

beginning at line 30 with the following rewritten paragraph:

The SIT-TEL communication system may additionally be incorporated into other types of vehicles including, but not necessarily limited to, snowplows, roadway construction vehicles, ambulances, and/or fire trucks which utilize visual warning lights. (FIG. 72.) In these vehicles a visual warning signal light may be generated simultaneously with the emission of a SIT-TEL pulsed LED light signal.

On page 138, please replace the paragraph beginning at line 3 with the following rewritten paragraph:

SIT-TEL communications may be accomplished between a standard motor vehicle and an emergency vehicle 978, through the emission of a pulsed LED SIT-TEL signal from an emergency vehicle 978, light bar as earlier described. An audible alarm ~~948~~, may be generated requiring an acknowledgment signal by a driver or passenger for actively manipulating a switch to terminate the emission of the audible alarm ~~948~~ thereby acknowledging receipt of the SIT-TEL signal from an emergency vehicle. In addition, the manipulation of a switch to terminate the audible alarm ~~948~~, may simultaneously instruct the controller to illuminate LED light sources for transmission of a confirmation SIT-TEL signal to the originating emergency vehicle 978.

On page 138, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

Referring to FIGS. ~~73~~ 78 through ~~75~~ 80, the SIT-TEL pulsed LED light communication system and flare 1000 are described herein. The flare 1000 includes a casing 1002 and a main body 1004. The casing 1002 includes a chamber 1006. Positioned within the chamber 1006 is the SIT-TEL pulsed LED light control system including a first controller ~~814~~ 815 and a parachute 1008. Within the chamber 1006 is located an affixation bracket 1010. The affixation bracket 1010 is constructed and arranged for attachment to the support cords 1012 of the parachute 1008.

On page 138, and continuing onto page 139, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

The main body 1004 has a cavity 1014. The cavity 1014 holds solid fuel propellant and/or other fuel 1016 which is used to power the assent of the flare 1000 through

engine 1018. The exterior of the main body 1004 may include one or more stabilizers 1020 to assist in the assent of the flare 1000 following discharge from an expulsion device which may be a mortar 1022. Within the chamber 1006 is located the first controller ~~814~~ 815 and battery ~~844~~. A first receiver ~~818~~ 819 which may include photo diodes traverses the casing 1002 proximate to the first controller ~~814~~ 815 and LED illumination sources ~~828~~ 829. The LED illumination sources ~~802~~ 803 are positioned to the exterior and top of the casing 1002 and are in electrical communication with the controller ~~814~~ 815 through wire or other connectors 1024. The functions of the first controller ~~814~~ 815, battery ~~844~~, first receiver/photo diodes ~~818~~ 819 and LED illumination sources ~~828~~ 829 are identical to the functions as earlier described.

On page 139, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

During launch, the flare 1000 ascends upwardly where the LED illumination sources ~~802~~ 803 are identified as being positioned in a location proximate to the nose of the flare 1000.

On page 139, please replace the paragraph beginning at line 7 with the following rewritten paragraph:

The exhaustion of the solid fuel propellant 1016 by the engine 1018 represents the apex of the trajectory of the flare 1000. At this point, the casing 1002 separates from the main body 1004 to open the casing 1002 for deployment of the parachute 1008. The parachute 1008 exits the open end of the casing 1002 to deploy the light emitting diode light sources ~~802~~ 803 in a downwardly direction. Following separation of the casing 1002 from the main body 1004 an internal switch may be activated and/or a timer may initiate the transmission of pulsed LED SIT-TEL light signals which are used to communicate information to one or more second receivers ~~822~~ 823.

On page 139, please replace the paragraph beginning at line 15 with the following rewritten paragraph:

The first receiver ~~818~~ 819 is adapted to receive, detect, decode, and process potentially encrypted information as communicated by pulsed LED light signals from a third controller 1026 for programming and/or storage of messages upon the first controller ~~814~~ 815.

On page 139, please replace the paragraph beginning at line 19 with the following

rewritten paragraph:

Separation between the casing 1002 and main body 1004 for deployment of the parachute 1008 may be assisted by a controlled explosion proximate to the affixation bracket 1010. The affixation bracket 1010 may be a separation plate which is sealed with respect to the interior walls of the casing 1002 to protect the first controller ~~814~~ 815 from adverse environmental elements. A second separation plate 1028 may be fixed and/or integral to the interior walls of the main body ~~104~~ 1004 to enclose the solid fuel propellant 1016 preventing damage to the parachute 1008. The secondary explosion to separate the casing 1002 from the main body 1004 exposes an opening in the end of the casing 1002 to open the chamber 1006 holding the parachute 1008 for deployment of the parachute 1008 for a prolonged descent of the flare 1000.

On page 140, please replace the paragraph beginning at line 1 with the following rewritten paragraph:

A third controller 1026 may be proximate to the mortar 1022 and flare 1000. The third controller 1026 is used to program the first controller ~~814~~ 815 to define the pulsed SIT-TEL LED light messages to be transmitted to troops within an operational theater.

On page 140, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

The third controller 1026 may be connected to a third transmitter 1030 which is used to transmit SIT-TEL pulsed light signals to the first receiver ~~818~~ 819 for storage upon the first controller ~~814~~ 815. The third controller 1026 may further include a third receiver ~~930~~ which is used to receive SIT-TEL pulsed LED light signals from an external controller or signal processor, for further transmission to and storage upon the first controller ~~814~~ 815 of the flare 1000.

On page 140, please delete the paragraph beginning at line 11:

~~The first controller 814 of the flare 1000 regulates the transmission of pulsed LED light signals for communication to troops within an operational theater.~~

On page 140, please replace the paragraph beginning at line 13 with the following rewritten paragraph:

SIT-TEL pulsed light communication signals are generated by the LED

illumination sources ~~802~~ 803 of the flare 1000 to be received by fourth receivers 1032 as integral to a fourth controller 1033 which is proximate to troops within an operational theater.

On page 140, please replace the paragraph beginning at line 22 with the following rewritten paragraph:

A fourth transmitter 1036 as electrically coupled to fourth controller 1033 may be used to communicate pulsed LED light signals from the ground to the first receiver ~~818~~ 819 of the flare 1000.

On page 140, and continuing onto page 141, please replace the paragraph beginning at line 30 with the following rewritten paragraph:

The flare 1000 including the SIT-TEL communication system in conjunction with the fourth controller 1033 and fourth receivers 1032 enables troops to receive communications through the use of pulsed LED light signals. The LED illumination sources ~~802~~ 803 as coupled to the first controller ~~814~~ 815 are sturdy and sufficiently strong to withstand shock exposed to the flare 1000 following discharge of the solid fuel propellant 1016 from the engine 1018.

On page 141, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

Alternatively, prior to deployment, the flare 1000 may be coupled to the third controller 1026 which may be a central processing unit via a cable 1038. Information including encryption and/or encoding information may be passed from the central processing unit of third controller 1026 to first controller ~~814~~ 815 for future transmission from LED light sources ~~802~~ 803 during use of flare 1000. The coupling of the third controller 1026 to the flare 1000 may occur proximate to the location of the first receiver ~~818~~ 819.